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ABSTRACT

This guide for teachers, supervisors and administrators offers a conceptual framework and resources for developing a complete nutrition education program. Included are: (1) a statement of need for nutrition education, (2) definition of what nutrition education should encompass; (3) goals identified by teachers, curriculum specialists and nutrition specialists, and (4) an outline of current issues in nutrition. These ideas are incorporated in an outline of concepts for a comprehensive kindergarten through grade 12 nutrition curriculum which includes a brief description of key ideas, and a description of a total school nutrition program which includes the components of food service, nutrition instruction, and community-family involvement. In addition, resources for teacher use in planning a nutrition curriculum or teaching unit are listed. Citations include audiovisuals, bibliographies, books and pamphlets, catalogues, curriculum guides and periodicals. Also included are names and addresses of people in state organizations and agencies related to public instruction and health. (Author/SS)

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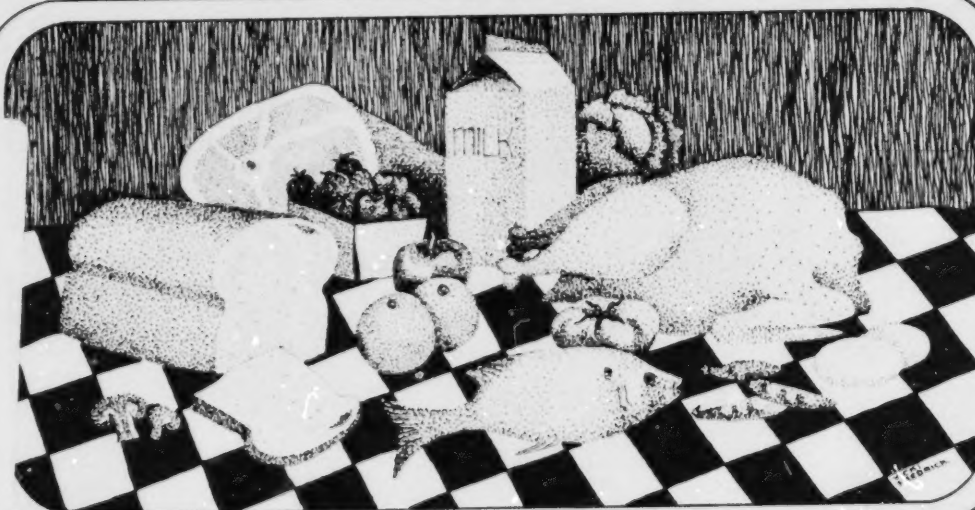
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NUTRITION EDUCATION

A
MULTIDISCIPLINARY
APPROACH

1977



Wisconsin Department of Public Instruction
Barbara Thompson, Ph.D., State Superintendent

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INTRODUCTION

This publication has been developed to affirm the Wisconsin Department of Public Instruction's belief that nutrition education is a vitally important component of a child's education. It is intended to assure teachers, supervisors and administrators that nutrition content can be integrated into existing course structure in such fields as health, science, social studies, mathematics, agriculture and industrial education, as well as home economics where it has traditionally been taught. It is planned to be a beginning tool in exploring the vast wealth of resources available to carry out a dynamic nutrition education program.

The user of this guide will learn today's broad definition of nutrition and be introduced to needs, problems and critical issues in the field. Suggested concepts and content are outlined for local curriculum planners. A complete school nutrition program is described so that interrelationships among the instructional, food service and community-family components can be visualized. Finally, a detailed listing of resources is offered as a practical tool to assist in designing and implementing a local nutrition curriculum.

Barbara Thompson
State Superintendent

TODAY'S NEED FOR NUTRITION EDUCATION

The White House Conference on Food, Nutrition and Health, held in 1969 emphasized the need for a dynamic nutrition education program that begins in early childhood and continues through the elementary and secondary schools, to help young children acquire positive attitudes toward food and to help older children assume responsibility for their own food selection and to prepare them for adult and parental responsibility. The Nutrition Education Committee included among their recommendations "that a comprehensive and sequential program of nutrition education be included as an integral part of the curriculum of every school in the United States and its territories."¹ In spite of this recommendation made several years ago, few schools today have planned, sequentialized programs in nutrition education.

Do children in Wisconsin schools need nutrition education? The following statement, developed by the Department of Nutritional Science at the University of Wisconsin, suggests that they do and cites the following reasons: "Health problems with a nutrition component are common in Wisconsin and throughout the nation. These include obesity, cardiovascular disease, dental caries, diabetes and kidney disease. There is a lack of understanding of the specific role of nutrition in both the development and treatment of these diseases. Health professionals, administrators of health programs and teachers are frequently unaware of current knowledge of the subject."

The statement continues with reasons for nutrition problems in all sectors of Wisconsin's population:

"Changing socioeconomic conditions and technological developments can affect nutrient intake. Poverty reduces the opportunity for obtaining a varied diet. Changes in food consumption patterns due to changes in life style include eating more meals away from home and less control over total dietary intake within the family. Providing adequate amounts of food with the growing food and population imbalance is a general concern. The increased number of new food products as the result of technological developments leads to uncertainties about nutrient intake."

Another factor which complicates the problem and accentuates the need for the school to play a role in nutrition education is pointed out as the statement continues: "A major barrier to nutritional health in the state of Wisconsin and in the U.S. generally is the prevalence of nutrition misinformation due to the numbers of books, magazines and popular articles of various types published either purposefully to disseminate misinformation for profit or inadvertently by persons not well qualified in nutrition. The need for more sound nutrition information in an appealing format is a major concern of professional nutritionists as is the dearth of teachers and even health professionals qualified to provide nutrition education."

In addition to the persuasive reasons given above, schools are obligated by Wisconsin Statutes to offer courses which "provide learning experiences based on scientific knowledge of the human organism as it functions within its environment and designed to favorably influence the health, understanding, attitudes and practices of the individual child which will enable him to adapt to the changing health problems of our society."² Such instruction unquestionably includes nutrition, since nutrition is a keystone to total health. Other state statutes support the one cited in making clear the intent of the citizens of the state that

nutrition teaching be carried out in Wisconsin schools. (See Appendix B for other pertinent Statutes.)

All evidence seems to indicate that children cannot be expected to select by instinct a diet which meets their nutritional needs. Whether acquired in or out of school, good food habits are the result of learning experiences. Schools are challenged to make their contribution to the learning experience a positive one.

DEFINITION OF NUTRITION EDUCATION

Nutrition, Food, Health and Education

Nutrition may be defined as the process by which food is ingested, absorbed, and used for growth, maintenance, and repair of the body. Food is the source of nutrition, and the status of health and well-being is the most important outcome. Good nutrition is not the sole ingredient of good health, but good health is not possible for long (if at all) without good nutrition.

Food is any substance that is eaten or otherwise taken into the body to sustain life, provide energy, and promote nutrition. Many more substances are available for use as food than are commonly used as food by any one individual or culture.

Health has been defined as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity. Since such a state seldom exists for more than an instant in time, it has also been described as a quality of functioning. Health is feeling good when you wake up in the morning, being able to work and play hard, being satisfied with the body you have and yet wanting to maintain and even improve its condition and appearance, living with a certain amount of pain and discomfort without it interfering too much with the enjoyable things you still can do.³

The terms "nutrition", "food" and "health" refer to the subject matter of nutrition; education refers to the process by which information about the subject is conveyed to the learner, or becomes a part of his experience. Acquiring or imparting knowledge, developing the process of reasoning and judgement, and generally preparing oneself and others for mature life, are all a part of the process of education.

So What is Nutrition Education?

Since our definition of education includes the movement towards mature living and concern for others as well as self, our definition of nutrition education is not complete if it refers only to food entering the body, nourishing it, and producing a healthy individual. The process of nutrition education must prepare the learner to evaluate and meet his own daily food needs, but must also help him to see that others, even in his own immediate sphere of activity, may need help to meet their nutrition needs. The process of nutrition education must prepare the learner to understand that the economic resources of the individual, the family, and the nation will govern to a large extent the opportunity to choose a good diet. The broader view of nutrition education must embrace an understanding of the production, marketing and distribution of food; the problems of supply of food because of conditions of climate, weather, technology, political regime, and population density; the effect of the availability of food, not only on individual human beings, but on whole societies.

Nutrition education then, is a broad field, with roots in many disciplines. It forms part of the subject matter of science and health, home economics and physical education, agriculture and political science, industrial education and mathematics. It includes not only classroom instruction, but what the child learns in the lunchroom, the corridors, and outside the school in the community. Nutrition education is both aided and abetted by parents, television, fast-food franchises, and school policies.

Nutrition teaching can be stereotyped and traditional, including only information about the basic four food groups and descriptions of digestion.

Or it can be lively and challenging, expanding to include many topics and activities appropriately in the subjects referred to above. Nutrition is a complex scientific field with research going on continually. It is a social action field with issues to be investigated. Nutrition education is a frontier subject which will grow more important and significant with every passing day.

GOALS OF NUTRITION EDUCATION

A group of teachers, curriculum specialists, and nutrition specialists working together on this guide identified goals which they believed important for a nutrition education program in Wisconsin schools. They include offering students opportunities to:

1. Examine relationships of nutrition to human growth, development and performance.
2. Translate nutrition knowledge appropriately into daily food practices.
3. Examine effects of environmental factors on food practices.
4. Explore elements and effects of technology on food quality and availability.
5. Explore the work of people and job opportunities in the field of food and nutrition.

Toward Excellence in Education⁴ sets forth objectives for School Food Service programs which include nutrition education as an important component:

"The objectives of school food services center around the provision of nutritious, well-balanced meals in conjunction with coordinated nutrition education activities. Programs in many areas are evolving into a more complete community service through the extension of benefits not only to students of traditional school age but to other consumers ranging from those of preschool age to elderly citizens. Nutritional status is related to one's health and well-being. School food services can play an important role in assuring that part of the daily dietary requirements are being met for those participating in the various programs.

"The nutrition education component of school food services is most important. Research indicates that proper food habits are learned. Experiences in the school food services program, especially when correlated with in-classroom and other learning activities, provide an exceptional source of basic nutrition education information.

"Additional objectives of school food services programs may involve teaching social graces to school children and the use of school food services facilities for teaching job skills to students who may wish to seek a post-high school vocational position in the quantity food production industry."

The State Superintendent's Task Force on Educational Goals for Wisconsin Public Elementary and Secondary Schools has defined goals for education in yet another way: "self-realization, human relations, basic skills, mental and physical health, career education and occupational competence, cultural appreciation, lifelong learning, citizenship and political understanding, economic understanding, physical environment, and creative, constructive, critical thinking."⁵

From the foregoing statements it is apparent that the teaching of nutrition throughout the curriculum can be an integral and important part of achieving many established goals of education. Local schools are encouraged to formulate their own goals and objectives for nutrition education, based on the cited and other statements. By so doing, the subject matter of nutrition can be interrelated with other subject matter and goals for an effective and efficient program.

CURRENT ISSUES IN NUTRITION

A remarkable diversity of opinions and practices exist in the field of nutrition. Misinformation and quackery abound. Some of the more frequently raised issues which the teacher may expect to encounter are identified here. Some of these topics demand a careful and honest search for the truth. Others offer an opportunity to explore and formulate values. All are topics which make the study of nutrition significant.

Weight control - best methods of losing and controlling weight

Teen-age pregnancy - effect of nutritional status of mother on her own health and that of unborn infant

Diet and health - relationship of diet to heart disease and cancer, megavitamin therapy, hypoglycemia

Proliferation of nutrition information and the difficulty of knowing which information is accurate and which is not

Food production and supply - use of pesticides, fertilizer, additives, quality control, continued need to monitor what people are eating to determine effect of food processing on health

World food supply - ability to produce sufficient food on world basis, need to modify ways of eating so everyone can eat, relationship of population to food supply, treatment and prevention of severe malnutrition in some parts of the world

Vegetarianism vs. established food patterns

Federal food programs - food stamps, WIC, child nutrition programs,
commodity supports, surpluses - shortages, sales to other countries

Inflation - ability of people at lower economic levels to meet their
nutritional needs

GENERAL CONCEPTUAL STRUCTURE OF NUTRITION EDUCATION

The following concepts are suggested for inclusion in a comprehensive, kindergarten through grade twelve nutrition curriculum. Each local school can decide where these concepts can best be developed and what methods and materials will be most suitable for developing them.

I. Relationship of Nutrition to Human Growth, Development and Performance

A. Relationship of nutrition to health

1. functions of nutrients
2. chemical nature of food and nutrients
3. influence of metabolic process on health
4. effect of nutrient modification and supplementation
5. effect of nutrition on appearance and performance

B. Selection of adequate diets

1. differences in nutritional needs during life stages
2. use of daily food guides (basic 4)

II. Relationship of Culture to Food Choices

A. Influence of social-psychological-religious factors (local, state, national and international)

B. Impact of political systems (local, state, national and international)

C. Use of economic resources (human, natural, capital); (local, state, national and international)

D. Impact of industrial development (local, state, national and international)

E. Effects of geographical location (local, state, national and international)

F. Effect of population (local, state, national and international)

III. Relationship of Food Technology to Nutrition

A. Effects of research and development

B. Factors of production, preparation and service

C. Factors in marketing and distribution (consumer, storage)

D. Delivery of food service

E. Development of food regulations, consumer protection and consumer services

CONTENT STATEMENT

The Content statement is an expansion of the outline found on the preceding page. The Concept statement identifies key ideas. The Content statement elaborates them somewhat. Together they form a brief statement of the body of knowledge called nutrition.

I. Relationship of Nutrition to Human Growth, Development and Performance

Proper nutrition is essential to physical and psychological health. Food is the source of nutrients needed by the human body for maintenance and growth.

The kind and amount of food consumed has a profound effect on the way one feels and performs due to the different metabolic functions of the various nutrients present.

A. Relationship of Nutrition to Health

1. Function of nutrients

Each nutrient required by the human body has a unique function which contributes to the total nutritional well-being of the individual.

It is of primary importance that a person selects a diet which includes the necessary nutrients in the proper amounts. Each food contributes different types and amounts of nutrients. Therefore, it is necessary to consume a variety of foods to obtain the necessary nutrients in the amounts needed by the human body.

Various nutrients are essential to health because of their ability to function as energy sources, building units, and regulatory factors. The process of digestion releases these nutrients from food in a form which the body can utilize.

2. Chemical nature of food and nutrients

Each nutrient has a small biochemical function that fits into the total integrated and complex metabolic process. The chemical nature of each nutrient has implications for its metabolic function in human nutrition. The biochemical function of each nutrient is closely allied to its chemical composition.

3. Influence of metabolic process on health

The metabolic process, from digestion to utilization of nutrients, is a highly integrated and complex one. The primary purpose of the metabolic process is to supply necessary nutrients to the body for the maintenance of health. Each of the various nutrients needed by the human body has a specialized function essential to the operation of the total metabolic process.

It is necessary for the body to release nutrients from the food ingested to be available for utilization by the body. The process of releasing nutrients in a form which the body can use is called digestion. Once available, the body has specific mechanisms for utilizing the nutrients and for discarding the waste products produced.

4. Effect of dietary supplements

When considering the use of dietary supplements it is wise to judge their nutritional significance in terms of their effect on health, weight control and physical performance.

A person's nutritional status can be seriously affected by the consumption of harmful substances such as alcohol and drugs.

5. Effect of nutrition on appearance and performance

Improper nutrition, in terms of both over and under consumption of nutrients, has serious implications for appearance, development, and performance.

There is a direct relationship between caloric intake and caloric expenditure in terms of weight gained or lost. Therefore, properly adjusted food intake in relation to the kind and amount of physical activity is an important factor in weight control.

Proper nutrition of plant and animal species is important for their own health as well as for their nutritional value for the next consumer on the food chain.

B. Selection of adequate diets

1. Differences in nutritional needs during life stages

Nutritional needs have to be altered throughout an individual's life span to accommodate different growth, development and performance levels.

This information must be used to meet adequately the needs of the individuals in the family who are at various developmental stages. Menu planning may have to consider specific health problems within the family that are treated by dietary means.

2. Use of daily food guides

The selection of an adequate diet for a family is founded on the knowledge of the nutritional composition of various foods.

II. Relationship of Culture to Food Choices

In every society there are factors, other than nutritional quality, that influence selection of food for consumption: cultural heritage, socio-

economic status, political ideology, social pressures, learned habits, psychological needs, available resources, and religious customs. The cost, composition and form of food available to the consumer is governed by such factors as technology, geography and population.

A. Influence of social, psychological, religious factors

There are numerous values, pressures and influences present in our society that affect family food consumption patterns. Family life styles, social settings, psychological factors and cultural customs all help govern food choices.

B. Impact of political systems

The government has established state, federal and international agencies and regulations to govern our agricultural production. In turn, these standards have affected the type, quality, quantity and price of farm products. It is within the limits of these standards that the agribusiness system supplies the people of the world with food. The efficiency of this system is influenced by factors such as: societal structure, population distribution, geographical location, business processes and resource availability.

Throughout the production and marketing of food its nutritional quality and compositional safety is closely monitored by state and federal agencies and regulations. The consumer plays a vital role in the development and support of legislation that governs these standards.

C. Utilization of economic resources

The availability and utilization of resources such as time, energy, equipment and money contribute to food consumption patterns of families. In turn these food consumption patterns determine the nutritional adequacy of diets and the nutritional well-being of individuals.

D. Effects of geographical location

Geographical factors determine the type and cost of food.

E. Effect of population

Population influences the demand, production and distribution of food.

III. Relationship of Food Technology to Nutrition

A. Effects of research and development

Research findings designed to increase food production and develop new products have numerous nutritional implications that demand consideration. We need to evaluate the risks, costs, and benefits

involved in the application of new research findings to agricultural operations. Research is continually improving old methods and developing new methods to increase the quality and quantity of food.

B. Factors of production and preparation

A primary concern of production and preparation of food should be the maintenance of nutritional quality and food safety. The selection of a food processing method should be based on the evaluation of available resources - technology, time, energy, manpower, capital and property.

Techniques to maintain food safety and nutritional value of food must continually be practiced in industry and in homes.

In the rationalization of the use of food additives and plant sprays, their need, value and effect must be delineated.

Numerous biological and chemical principles are used in the production and preparation of our food supply.

C. Factors in marketing and distribution

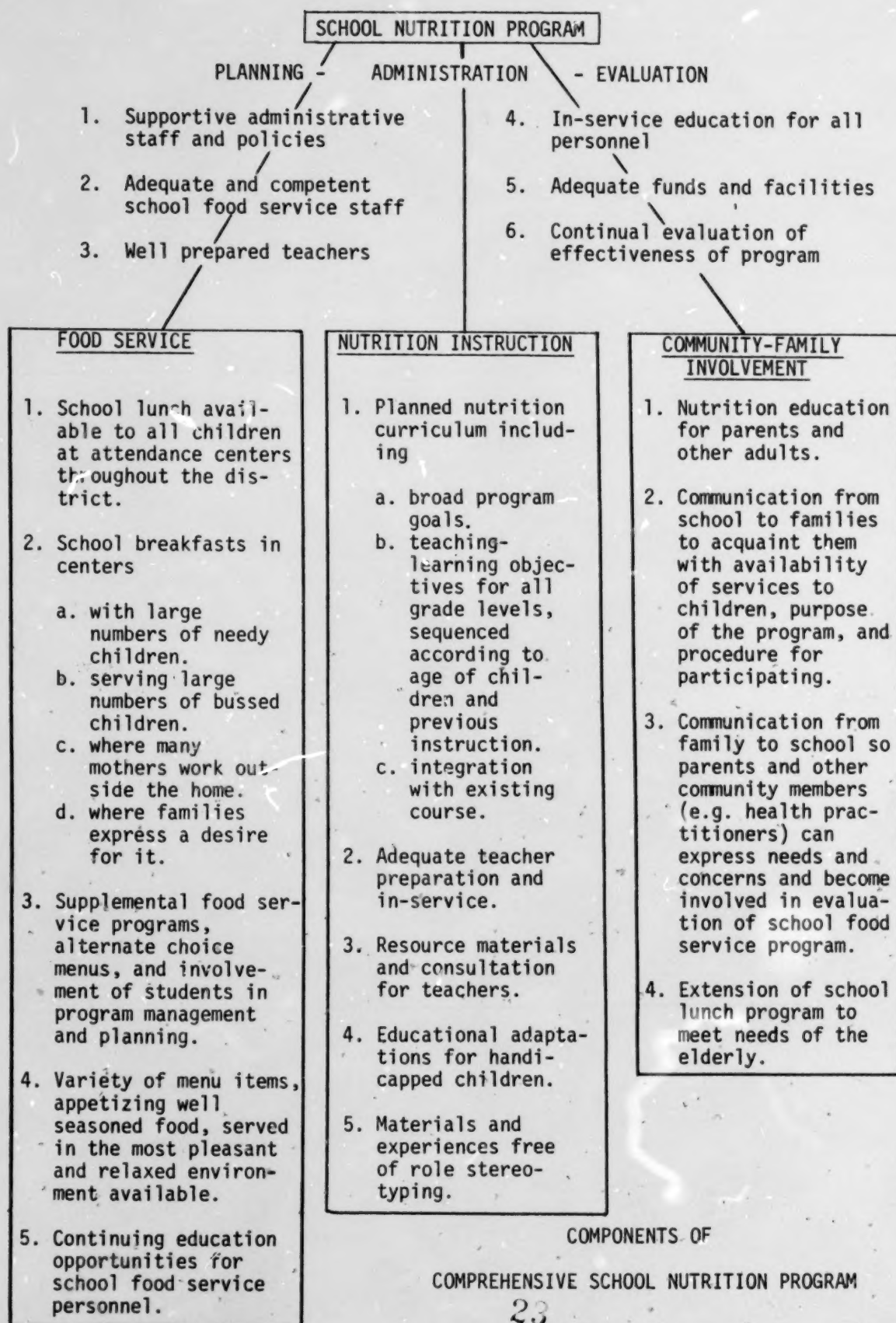
Marketing and distribution of food products involves evaluation of packaging, storage, transportation, demand and supply, pricing and advertising.

The effectiveness of the marketing and distribution system for agricultural products has implications for the return realized by the agribusinessman. The marketing and distribution of farm products is carefully controlled by government regulations to ensure truth, safety and quality.

In purchasing food on the retail market it is important for the consumer to know and apply his rights and responsibilities so as to make intelligent decisions in light of his values, resources and needs.

D. Implications of service and regulations

The numerous types of food services available need to be assessed in terms of the need and value of the service rendered. Above all, those services must stay within the regulations established to protect both the consumer and product.



A TOTAL SCHOOL NUTRITION PROGRAM

Nutrition Instruction

A planned program of sequential nutrition instruction is an important component of the total school nutrition program. The nutrition instruction program includes planned instruction, in-service education for teachers and adequate instructional materials.

If the goal of nutrition education is to influence behavior, then teaching nutrition involves more than a simple presentation of facts. We have tended to assume that once people know what is good or bad for them they will respond accordingly. If there were a straight line connection between acquiring facts and changing behavior it would be much easier than it is to influence behavior of any kind. Human behavior would change with frightening rapidity. Obviously, resistance to change has some value to people. The problem comes when the individual's resistance prevents examination and consideration of new ideas for use in his life. The task of education is to make a diagnosis based on theories about why resistance exists and what need it serves; and to develop a plan for helping the individual consider new information. All the factors which influence human behavior are the subject matter of psychology, anthropology, and the other behavioral sciences. All the factors which enter into making a teaching plan are the subject of teaching/learning theory and practice. Neither subject can be dealt with here, but the literature is extensive in both fields, and needs to be applied to nutrition education.

Certain assumptions may be made about nutrition education and can serve as guidelines in planning the instructional program. The following assumptions are suggested for consideration:

The objective of any nutrition teaching is to help the individual translate nutrition knowledge into appropriate behavior. Nutrition facts are necessary, but by themselves are seldom sufficient to influence dietary habits. Food intake is influenced by taste preferences, sense of smell, appearance of food, social and situational conditions, and emotional state at the time of eating, among many other factors. The sophisticated educator recognizes the importance of these various conscious and unconscious motivations and takes them into consideration in planning educational experiences.

Nutrition teaching is concerned not only with immediate goals but also with long range results and with the quality of these results. Many nutritionists are convinced that the dietary errors of childhood predispose children to health problems in their adult years.

Nutrition education and nutrition experiences have significance only in terms of their meaning to individual children, according to each child's needs, motivations, perceptions, reactions, and experience. It is vital that individual differences constantly be taken into account in nutrition education and in providing for the nutritional needs of children.

A child's understanding and knowledge of nutrition is not only related to direct instruction but also to whatever he experiences in and out of school. Nutrition teaching and learning occur all the time. School and community policies, the culture in which the child lives, parental attitudes, and peer pressure are among the many influences on nutrition practices.

It is important that nutrition instruction be presented with due consideration for the characteristics of different ages and stages of development as the child moves through the school years. There is a significant relationship between what happened in the past to the present and future of the child.

The current definition of nutrition education suggests the involvement of many people from more than one discipline in planning and teaching nutrition subject matter. A carefully planned interdisciplinary curriculum, using existing course structure in several fields, can provide a mechanism for including all important content. In identifying the content to be included, priorities need to be set on subject matter importance. Top priority content must be included in subjects taken by all or most students. At times, the same concept can be approached by different disciplines to demonstrate the inherent complexity of the subject. Provision will need to be made for specialized classes to deal with some topics in more depth.

Schools should be aware of the nutrition resources available and use them effectively according to needs. Every school and community has people and material resources close at hand to assist with nutrition education. Schools and teachers need to provide a wide range of activities and materials, so that each teacher and each child can select his own pace and style for teaching and learning.

Interpersonal relationships and the emotional climate of the school are important determinants of learning. Mutual respect is a necessary component for cooperation among professional people. The varying educational and

experiential backgrounds of many persons (including the child) can make different but equally valuable contributions to learning.⁶

These assumptions suggest that the process by which a person learns is equal in importance to the content. Curriculum planning which takes this into account will pay off by coming closer to reaching the goals that have been set for the nutrition education program.

Each local school is encouraged to work out a plan to insure that key nutrition concepts are included in science, social studies, health, physical education, math, or whatever other subject seems most appropriate. The interdisciplinary nature of such a nutrition curriculum presents a challenge. A planned, sequentialized curriculum is difficult to develop when teachers are prepared in the subject area being developed. When teachers do not have special training in the subject and are dividing and sharing responsibility, curriculum development is even more difficult. Fortunately excellent resources exist to help local schools. The resources section of this book is designed to acquaint the reader with persons and materials which can be of assistance in the process of developing an instruction plan for nutrition.

Practical Steps

Following are some practical steps which can be followed in developing a plan for nutrition education. They may be considered reminders for experienced curriculum planners.

- Any interested person may appropriately initiate the process of planning a nutrition education program, providing care is taken to involve all others who have a role.

- Identify others who share the concern about the importance of nutrition education and enlist their support and assistance: teachers, supervisors, administrators, food service personnel, students, parents, members of the community, others.
- Seek support from administrators and supervisors if interest has arisen elsewhere. Ask for cooperation and support that is backed up with a commitment of time and money.
- If school personnel do not feel qualified in nutrition, perhaps some will want to take formal course work in the subject. Identify colleges where basic course work in nutrition and nutrition education are offered. Arrangements may be made for extension courses to be offered in the community, or teachers may elect to attend summer school classes. (See Resource Section for Wisconsin colleges offering such course work.)
- Keeping up with information is a challenge to nutrition educators. Facts today are not absolute. The body of knowledge constantly grows bigger and changes. Even professional personnel highly educated in nutrition and continuously in touch with new research and developments find it necessary to make subjective value judgements. Teachers are faced with the question of how to keep up with the facts and how to assess their validity. Children need to learn this same process. Teaching children where to find facts and how to use them may be as valuable, or more so, as teaching the facts themselves. The ability to face change constructively may be one of the most important things of all to teach children.

● In-service education is one mechanism for keeping up with new ideas and trends in nutrition. Arrangements can be made for in-service education through any one of several resources. Persons in the community or close at hand who can offer consultation or other assistance include home economics teachers, dietitians, the county extension home economist, public health nutritionists, Dairy Council of Wisconsin and school food service personnel. Each one has a unique contribution to make as a result of his or her preparation, experience, and job responsibility. The Department of Public Instruction can assist in planning in-service education on request.

- Establish an interdisciplinary staff committee to begin to plan a nutrition education program tailored to your school.
- Select the subject areas in which nutrition will be taught.
- Identify key nutrition concepts.
- Decide which concepts will be taught at which level, and in which subject.
- Develop specific objectives for each subject area and grade level.
- Familiarize yourselves with controversial issues in nutrition and determine which of these you will include and how they will be taught.
- Gather together as many resources as possible for teacher use. A library of inexpensive but readily available materials is indispensable,

whether planning a curriculum or a teaching unit. The materials listed in the Resource Section of this book have been screened for scientific accuracy and pertinence. Other nutrition materials should be chosen carefully, as misinformation abounds. Professional nutrition experts will usually be happy to help you make a judgement about validity and accuracy. Among the materials listed in the Resource section are nutrition curriculum guides which have been developed by other state education departments, the food industry, and commercial education sources. The local school system may want to refer to some of these for ideas and suggestions.

- Consider and plan methodologies which you believe will achieve your objectives and which are consistent with the philosophy of your school.
- Whenever possible coordinate what is presently being taught in nutrition with new material that is being introduced.
- Plan ways to evaluate the program on a continuing basis. Make changes based on experience and learning.
- Scientific, social, and political aspects of nutrition are constantly evolving and changing, so plan for continued renewal and updating for teachers and other school personnel.
- Choose a person to function as a leader of your committee at least for purposes of calling the committee together as needed. Coordination, communication and continued planning are particularly important in an interdisciplinary effort.

School Food Services

A total school nutrition program provides adequate food for the normal growth and development of children, a planned program of nutrition instruction, and community involvement and support of the school's program. The school food service program can best serve the needs of children when it is planned for the specific children in the particular community where it is served. Individuality and creativity in meeting the nutritional needs of children are not only possible, but encouraged within the federal and state child nutrition programs.

To individualize the program it is necessary to find out about eating patterns of children in each community. What are community and family attitudes toward food and eating? What is the economic level of the community? To what extent does the food served at home need to be supplemented by the food served at school? Do children eat breakfast at home? Would growth and learning be enhanced if breakfast were served at school? Do children have special health needs related to nutrition, such as obesity?

The school food service program offers a center in the school where academic learning can be brought to life. The food that is served in schools is a daily demonstration of a way to eat. It reflects the combined values of the community, the school administration and staff, the food service personnel, and the students. An ideal program is one which offers nutritionally valuable foods in lunch and breakfast programs, vending machines, or wherever food is sold; which is accepted by children; and which promotes policies which support good nutrition in all school programs.*

*See Policy Statement on Food Served in Child Nutrition Programs in Appendix D.

The school food service staff and instructional staff can find many ways to work together to reinforce and support all components of a total program. For example, some schools have planned an introduction to the school food program for first graders to help them understand how food is prepared, where they will eat at school, how to carry their trays, and how to return trays when empty. Such an introduction encourages participation in the school food service program by making the child comfortable with the details and confident to participate. Similar learning activities can be jointly planned and carried out for children of other ages and interests.

School food service personnel need to take advantage of opportunities to keep abreast of new developments and changing priorities in the field of nutrition through professional meetings, short courses, personal reading, visits to exemplary programs, and other activities which promote learning.

Community-Family Involvement

The special heritage of each community and each family molds the eating patterns of children before they attend school. These unique patterns and needs can be identified by simple survey methods available to any interested teacher. Most teachers can recognize children who come from lower economic levels, for instance. We know from studies that families from this segment of the population have a more difficult time meeting the recommended daily allowance of nutrients than other families. Teachers who are sensitive to this fact can exercise care in suggesting daily food patterns appropriate to the cultural and economic backgrounds of the children. The school in this way is reaching into the community and becoming involved in the ongoing lives of community members. If children can be helped to make dietary changes by

building on what is already positive in their daily diet, the goal of good nutrition will be more readily achieved. Parental support is likely to be greater if the school is seen as promoting the teachings of the home rather than countering them.

Schools that value communication with parents will be able to find many ways of including them in nutrition teaching. Publishing school menus in the newspaper, inviting parents to school activities where children prepare and serve food, offering appealing courses for adults in foods, cooking, and nutrition are but a few of the ways of extending teaching from the school into the community. Communication becomes a two-way process when parents are invited to express their needs, interests, and concerns about the school nutrition program.

In addition to parents, other community residents can be involved in what's going on in school. Curriculum planners and teachers can begin by looking at the community of the school itself. A large majority of Wisconsin schools prepare and serve food to children each day. Whatever is offered to children in this program becomes one of the most important of the school's teachings about food. If the food offered in the lunchroom is nutritious, appetizing and accepted by the children, it will provide one-third of their daily nutrient needs and serve as a model for eating that can influence dietary patterns for years into the future. If the school food service does not meet these criteria, the first order of business is to find out what can be changed to make it do so.

The food preparation and service area of the school can also be viewed as a facility to demonstrate preparation of foods, to apply what is being learned

about menu planning, to evaluate the problem of food waste, and to learn practical job-related skills. School food service personnel generally show keen interest in nutrition education and would welcome a request from the teaching staff to join in nutrition education efforts.

Elsewhere within most schools are teachers of health and home economics who are usually teaching nutrition and who may be helpful in planning a total nutrition curriculum. Most schools receive services from public health or school nurses. Their interest in the health of children includes interest in nutritional status. Nurses can help identify specific nutrition needs in individual children, as well as community nutrition needs and patterns of eating. They can also lead school personnel to other resources in the community, such as public health and university extension nutritionists. Teen-agers can become teachers for younger children.

Outside of the school, teachers will find hospitals and nursing homes which are served by dietitians who can help in evaluating the accuracy of nutrition information and lead the teacher to additional dependable sources of information.

Nutrition education offers the opportunity for field trips to markets, dairies, food processing plants, farms, and a variety of other places associated with the production, preparation, and distribution of food. Such field trips, if carefully planned so that children have specific learning goals in relation to the trip, and if adapted to the age, understanding, and interests of the child, offer a way to relate academic learning to real life.

NOTE

The Department of Public Instruction is interested in knowing of places where nutrition curriculum work is being carried on. We hope you will inform us of your progress and problems and request consultation at any time, if you are engaged in nutrition instruction or program planning. By working with various schools we can facilitate exchange of information and ideas on what works well, as well as pitfalls that can be avoided.

CITATIONS

1. Final Report - White House Conference on Food, Nutrition and Health, Jean Mayer, Chairman. Washington, D.C.: Government Printing Office, 1969.
2. Wisconsin Statutes, Chapter 115, Subsection II, 115.35 (1).
3. Russell, Robert D., Health Education. Washington, D.C.: National Education Association, 1975.
4. Wisconsin Department of Public Instruction, Barbara Thompson/Superintendent, Toward Excellence in Education. Madison, WI: The Department, 1975.
5. State Superintendent's Task Force on Educational Goals for Wisconsin Public Elementary and Secondary Schools, Goals for Elementary and Secondary Public Education. Madison, WI: The Department, 1973-74.
6. Hull, Virginia, Betty Krippene, and Frances Porter, Manitowoc Story. Madison, WI: Department of Health and Social Services, Division of Health, 1967.

RESOURCES

This section of the guide lists resources for teacher use in planning a nutrition curriculum or teaching unit. With a few exceptions, materials for use with students are not included, but many of the books listed here will lead the reader directly to materials for use with students. Resources are categorized and listed according to the following groupings:

- Audiovisuals
- Bibliographies
- Books/Pamphlets
- Catalogues
- Curriculum Guides
- Periodicals
- People

All entries are annotated to help the user decide which resource will best meet his need. Publication information is given as completely as possible so that the local school can use this information to order materials.

Materials in the field of nutrition education are abundant, and this listing is in no way complete. Readers will find that one piece of material leads to another and the serious student will be able to keep up-to-date by beginning with almost any basic reference and following where it leads. A school system planning a nutrition curriculum development project is encouraged to invest in materials for teacher use. A small, compact, reasonably priced library can be assembled from the references listed here. If such a library is processed and circulated according to usual library procedures it would be readily available to anyone wishing to use it. Having materials available locally facilitates teaching by cutting down on the lead time needed for planning. A reference library is indispensable for use when planning a nutrition curriculum.

The wealth of curriculum resources available in the field of nutrition offers a wide range of choices for teachers and other school personnel in planning a nutrition curriculum. Curriculum planners are urged to acquaint themselves with as many materials as possible and draw from those which seem appropriate in planning their local nutrition teaching program.

AUDIOVISUALS

1. Audiovisuals for Nutrition Education. National Nutrition Education Clearing House, Society for Nutrition Education, 2140 Shattuck Avenue, Suite 1110, Berkeley, California 94704. 1975. \$2.50.

This publication contains selected evaluative reviews of games, coloring books, flannelboard stories, audiotapes and records, charts, posters, study prints, films, filmstrips, videotapes, slides, and transparencies in the field of nutrition. Each entry gives information about the type of audiovisual, suitable audiences, bibliographic data, ordering information, and evaluative comments by a nutrition specialist. Audience levels range from pre-school through adult.

2. Educational Motion Pictures - 1975-77 Catalog. Bureau of Audio Visual Instruction, 1327 University Avenue, Madison, WI (Mail address: P.O. Box 2093, Madison, WI 53701). No charge.

This catalogue, plus supplements, lists many nutrition films which may be borrowed on a rental basis by Wisconsin residents. Films are listed in a subject index by title only, and alphabetically with a description which includes the following: rental price, length of film, color or black and white, age level for which appropriate, publication date, and a short narrative description.

3. Health Multi Media Catalogue 1977, Wisconsin State Division of Health, P.O. Box 309, Madison, Wisconsin 53701. 1977. No charge.

A listing of films, filmstrips, records, slides, and tapes for use with audiences from pre-school through adult. At least 26 entries deal directly with nutrition, and several more deal with such related subjects as milk, dental health, diabetes, expectant parent education, and food service. Copies of this catalogue have been distributed to all Wisconsin school district administrators; junior, senior, and middle school libraries; parochial schools; school and public health nurses. Additional copies are available on request. Films and filmstrips listed in this catalogue are available at no charge to the Wisconsin user except return postage.

BIBLIOGRAPHIES

4. Basic Nutrition Facts. National Nutrition Education Clearing House, Society for Nutrition Education, 2140 Shattuck Avenue, Suite 1110, Berkeley, California 94704. July, 1975. \$2.50.

This publication contains a selected listing of printed and audiovisual materials useful to persons wishing to learn basic nutrition facts. Only those materials judged to contain a useful range of information about nutrition have been included. Materials covering highly specialized subjects or research information are not included. Each listing has been evaluated by qualified nutritionists. All listings are judged to be reliable and accurate. Each listing contains complete bibliographic information and details of how to order:

5. Elementary Teaching Materials and Teacher References. National Nutrition Education Clearing House, Society for Nutrition Education, 2140 Shattuck Avenue, Suite 1110, Berkeley, California 94704. Revised August 1975. \$3.50.

This publication is a selected compilation of printed and audiovisual educational materials useful as teaching tools and reference materials for teachers and others involved in teaching nutrition to elementary level students. The listed resources are available from a wide variety of sources such as federal, state and local agencies; educational publishers; professional associations; food industry; educational institutions; and individuals. Each item listed has been evaluated by qualified nutritionists and all listings are considered to be accurate and useful.

6. Nutrition Education - K-12, Teacher References, Concepts, Theories and Guides. National Nutrition Education Clearing House, Society for Nutrition Education, 2140 Shattuck Avenue, Suite 1110, Berkeley, California 94704. Revised 1976. \$3.50.

This resource contains a selected listing of printed and audiovisual educational materials useful to persons teaching nutrition to grades K-12. These materials are prepared by government agencies, educational institutions and associations, food industry and commercial education sources. It lists concepts of nutrition, theories on teaching nutrition, and guides to curriculum materials as well as bibliographies and leads to other sources of information. Serves as a tool to review current controversial topics and provide insights into solutions necessary to teach nutrition.

Each listing has been evaluated by qualified nutritionists and is considered to be reliable and accurate. All listings include bibliographic and ordering details.

7. Nutrition Education Materials. McNutt, Kristin, Compiler, Office of Education and Public Affairs, The Nutrition Foundation, Inc., 388 Seventeenth Street, N.W., Washington, D.C. 20006. 1974. \$5.00.

BIBLIOGRAPHIES

This index of nutrition education materials has been prepared to assist teachers and the general public in acquiring useful teaching aids and educational materials. The index lists booklets, pamphlets and audio-visual aids, as well as other material cited in nutrition publications or listed as available from federal agencies, professional societies, and health and educational organizations or foundations.

These publications have not been evaluated for content and are not necessarily recommended by the Nutrition Foundation.

The index is divided into seven color-coded sections, and complete and simple instructions in the beginning of the book make it an easy reference to use. Information is included on audience for whom publication was intended, author, source, date of publication, number of pages, and cost per single copy.

The last section of the index lists names and addresses of people in each state who are officials of agencies or organizations which can provide additional information or assistance in planning a nutrition curriculum.

8. Nutrition Education Materials for Teachers, Wisconsin State Division of Health, Nutrition Section, P.O. Box 339, Madison, Wisconsin 53701. Updated periodically. No charge.

A selected listing of printed resource materials, representing publications of commercial, professional, food industry, government, and individual sources. Includes both materials for teacher use and for use with children. Short descriptions are given for each piece of material, as well as information about source and cost.

9. Secondary Teaching Materials and Teacher References. National Nutrition Education Clearing House, Society for Nutrition Education, 2140 Shattuck Avenue, Suite 1110, Berkeley, California 94704. Revised, July 1974. \$3.50.

This publication is a selected compilation of printed and audiovisual educational materials useful as teaching tools and reference materials for teachers, youth leaders, and others involved in teaching nutrition to secondary level students. The listed resources are available from a wide variety of sources such as federal, state and local agencies; educational publishers; professional associations; food industry; educational institutions; and individuals. Each item listed has been evaluated by a qualified nutritionist and is considered to be accurate and useful.

Some items listed as teaching materials could be useful to both the student and the teacher or leader. Selected references on adolescent nutrition and food habits are included for their usefulness in relation to teaching nutrition to this age group.

BIBLIOGRAPHIES

10. The Very Hungry Caterpillar, and other stories about food, Harris, E., J. Inverso and J. Needham, 1975. From Albert E. Bedworth, Associate in Health Education, Division of Health and Drug Education Services, Bureau of Health Education, The State Education Department, 55 Elk Street, Rm. 233, Albany, NY 12234, 21 pp., spiral bound, single copies free (limited copies available).

An annotated bibliography, this resource lists 100 story books which have been chosen from children's literature for their ability to stimulate a child's interest in nutrition and health. The books are arranged with food as either the primary or secondary subject. Several suggestions are offered for activities that could make the reading of the books more of a nutrition/health education experience. Ten adult annotated nutrition references and classroom resources are also included. Parents, teachers and librarians should welcome this resource.

BOOKS/PAMPHLETS

11. Creative Food Experiences for Children, Mary T. Goodwin and Gerry Pollen, Center for Science in the Public Interest, 1757 S Street, N.W., Washington, D.C. 20009. (202) 332-4250. 191 pp. \$4.00.

This book has been written as a guide for preschools, day care centers, elementary schools, parent education classes, recreation departments, summer camps, scout groups, children's television programs and parents. Following an introductory statement on what children can learn from experiences with food and some general guidelines to involving children in food experiences, the bulk of the book is given over to food learning activities. Each activity has a stated objective, a list of materials and many suggestions for the teacher or leader for ways to reach the objective.

Final sections of the book include suggestions for relating food activities to the curriculum areas; an extensive listing of children's books which emphasize food; sources for additional nutrition teaching materials; a calendar of special events with which food is associated; and a generous number of recipes.

The authors of this book may be somewhat unduly concerned with the quality of the food supply. However, they present excellent suggestions for elementary activities, which can be used to meet the teacher's own objectives.

12. A Diet for Living, Jean Mayer, David McKay Co., New York, N.Y. 1975. \$8.95. 293 pp.; soft cover edition from Book Dept. C036 Consumers Union, Orangeburg, N.Y. 10962 \$4.50; Paperback from Pocket Books, New York. \$1.95.

The author gives answers - short and readable - to the most widespread questions Americans ask about feeding themselves and their families. The book is organized into three sections. The first deals with nutrition basics, the second with weight and well-being, and the third with the consumer in the supermarket and the kitchen. The second section, dealing with weight and diet, is concerned almost entirely with our two most important nutrition-related problems - overweight and heart disease. The final chapter should help alleviate some of the fears consumers have concerning what the food industry is doing to food before it reaches the kitchen. The book comes highly recommended for use by the concerned consumer.

13. Diet for a Small Planet, Frances Moore Lappe, Ballantine Books, 201 East 50th Street, New York, N.Y. 10022. 1971. 286 pp. \$1.25 paperback.

This popular book is written for vegetarians, to help them understand how to eat an adequate protein diet without including meat. The book opens with a philosophical statement about vegetarianism and then goes on to answer questions about whether it is possible to meet dietary needs without animal protein. Specific details about combining foods to complement each other and many recipes are included to make it a practicable handbook for the vegetarian.

BOOKS/PAMPHLETS

14. Dimensions of School Health, Victor Eisner, M.D. and Lawrence B. Callen, Ph.D., Charles C. Thomas, 1974. \$10.75

Chapter IX of this book is entitled "School Nutrition Programs", and is recommended for its detailed description of the components of a comprehensive school nutrition program. The author of the chapter is Eileen Peck, Dr.-P.H., Assistant Professor of Public Health Nutrition in Residence, University of California, Berkeley. She includes research on the impact of school nutrition programs on the health of students, objectives for school nutrition programs, factors to be taken into consideration in planning programs, information about nutritional assessment of children, and a reference list, among other topics.

15. Discovering Vegetables, Nutrition and Technical Services Staff, Food and Nutrition Service, U.S. Department of Agriculture, January 1975. No charge. Available from Food and Nutrition Services, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702.

This pamphlet is sub-titled The Nutrition Education Guidebook for School Food Service Managers and Cooperators. It is written for use with children ages 5 through 8.

Included in the booklet is an introductory statement which makes clear that cooperators includes anyone with a concern about children's eating habits. The importance of vegetables in the diet is explained in the next section, followed by the general and specific objectives of teaching children about vegetables.

Learning experiences are outlined in sufficient detail that the teacher will have to do little more than follow directions carefully after assembling food and equipment necessary to carry them out.

Sources of additional nutrition education materials are listed on the last pages.

16. The Family Guide to Better Food and Better Health, Deutsch, Ronald M. Meredith Corporation, Des Moines, Iowa. 1971. \$7.95 Hardcover \$1.95 Softcover (Bantam).

An excellent book which presents basic information and fundamental concepts in interesting and readable style. This book is written in such a way that the non-technically trained individual can understand and profit by its teachings. The reader will find dependable information on such topics as today's production and distribution of food, the use of "health foods" and supplements, natural and organic foods, dangers of common self-treatment for digestive ills, cholesterol in the diet, hypoglycemia, the cost to the public of vitamin and mineral supplements vs. their value, weights and measures deceptions, misleading advertising, the facts of food borne illness. All of these topics are discussed in relation to sound information about what the body needs nutritionally for health, and why. The book is advanced enough to go beyond the simple presentation of often-repeated facts about the basic 4, without being too complicated for the layman to understand.

BOOKS/PAMPHLETS

17. Food and Your Well-Being, Theodore LaBuza, West Publishing Co., St. Paul, Minnesota. 1977. 426 pp. \$9.95 paperback.

Dr. LaBuza states in the Preface that he has written this book to present information about food, dietary habits, and food preservatives in a simple form to the public. The purpose of his book is to give a balanced, factual viewpoint without going into laborious details of more scientific importance. He believes that many existing books are too complex to be understood by the average person and only make the reader scared. With this idea in mind, he has written a comprehensive, readable, and authoritative work which teachers should find interesting as well as informational background for nutrition teaching.

18. Food for Sport, Nathan J. Smith, M.D., Bull Publishing Company, P.O. Box 208, Palo Alto, California. 1976. \$4.95 paperback. 185 pp.

This book begins with information about nutrients and a basic diet which meets nutritional requirements for anyone. It then goes on to discuss non-traditional diets and dietary supplements; gaining or losing weight; the energy demands of the athlete; the athlete's need for water and salt; the pre-game meal and eating during competition; wrestling and other weight control sports; special needs of the elementary school child; and summaries of most important factors related to specific sports.

19. Food Is More Than Just Something to Eat, U.S. Department of Health, Education and Welfare, Public Health Service, Food and Drug Administration, 5600 Fishers Lane, Rockville, Maryland 20852. 1969. 30 pp.

Basic nutrition facts, dietary needs at different ages, the special needs of pregnancy, nutrition labeling, the value of processed food, and a daily food guide are included in this colorfully illustrated, large print pamphlet. Useful as general information for the teacher of nutrition and for use with high school students.

20. Food: Where Nutrition, Politics and Culture Meet, An Activities Guide for Teachers, Katz, D. and M. T. Goodwin, Center for Science in the Public Interest, 1757 S Street, N.W., Washington, D.C. 20009. 1976. 214 pp. Softcover, \$4.50.

The authors of this book have outlined an excellent selection of challenging activities for junior, senior high, and college-age youth. Creativity and imagination have been used to develop projects which involve youth in investigating the realities of food and nutrition in their own lives as well as the lives of others. Each chapter includes factual information for use by the teacher and/or with the class. All teaching activities are clearly outlined with objectives, resources, background materials, and procedures. Many are accompanied by questionnaires, charts, and diagrams, necessitating a minimum of preparation on the part of the teacher.

BOOKS/PAMPHLETS

The book is consumer-oriented, yet allows for free discussion of all sides of issues through the activities suggested. The authors may be somewhat unduly concerned with the quality of the food supply. However, they present excellent suggestions for activities which can be used to reach the teacher's own goals. This book would be of special interest to teachers of economics, social studies, history, political science, health, and biology. Teachers of home economics would also find it useful.

21. Guide to the National School Lunch and Breakfast Programs, Food Research and Action Center (FRAC), 2011 Eye Street, N.W., Washington, D.C. 20006, (202) 452-8250. August 1976. 24 pp. \$.75.

Specific information on how to get support for a school lunch or breakfast program in a school district is clearly outlined, including background facts about the programs, steps for implementation, solutions to possible problems, sample press releases and statements for meeting with the school board, and suggestions for follow up action. The guide is well-written, clear and logical in its organization. If your school already has school food service programs for children it is still worth 75¢ to get a copy of this booklet for the clear, simple explanation it gives of the intent and operation of the programs.

22. Ideas in Health Education, Wisconsin Department of Public Instruction, 126 Langdon Street, Madison, WI 53702. 1972. 82 pp. No charge. Limited supply.

This unique guide, reprinted with permission of the Florida Department of Education, is an idea book about school health education. Suggestions are provided which are designed to encourage educators in developing creative approaches to school health education. All of the ideas could be applied to the teaching of nutrition. In addition to general ideas there are specific references to consumer education, family health and nutrition.

23. Label It Nutrition, National Dairy Council, 6300 North River Road, Rosemont, Illinois 60018.

Label It Nutrition is a consumer education program which has been designed to teach consumers how to use nutrition labeling on foods in their day-to-day food purchasing and menu planning. The teaching package includes a leader's guide which gives the concept and objectives, some background information on how to use the package, and specific equipment needed. Also included is a slide presentation with accompanying cassette recording, and a set of workbooks. Suitable for use at high school level. Information on cost and other details available on request from National Dairy Council.

24. Living Nutrition, Stare, Frederick and Margaret McWilliams, John Wiley & Sons, Inc., New York, NY 10016. 1973. \$10.95.

BOOKS/PAMPHLETS

This text is divided into two major sections: sociopsychological aspects of nutrition, and nutrition from the physiological viewpoint. Each chapter concludes with a summary and an extensive list of related references. Tables in the back of the book contain valuable reference information on the composition of many foods, the chemical structure of vitamins and amino acids, selected dietary standards, and a glossary. In addition, there are tables and pictures throughout the text.

This book is a reliable reference book for the teacher and the serious student of nutrition.

25. The Meaning of Human Nutrition, Mina W. Lamb and Margarette L. Harden, Pergamon Bio-Medical Science Series, Pergamon Press, New York, N.Y. 1973. \$6.00 paperback. 273 pp.

This book is a basic text in nutrition which can be used by the teacher as a reference for her own background information. Includes information on the relationship of food and nutrition to the growth and development of children, which may be of special interest to teachers. Many additional references and readings are suggested. Cartoons lighten the presentation and the style of writing makes interesting reading.

26. The National School Lunch Program - Background and Development, Gordon W. Gunderson, FNS-63 - Food and Nutrition Service, United States Department of Agriculture, 1971. Single copies available without cost from Bureau for School Food Services, Department of Public Instruction. 30 pp. 126 Langdon Street, Madison, Wisconsin 53702.

A history of the beginnings and development of the school food service program in the United States, written by Wisconsin's first school food service program administrator. The book includes information on the beginnings of child feeding programs in Europe, early programs in this country, and moves up to the present, including chapters on the relationship between nutrition, learning, behavior and technical development in the school food service programs.

27. Nutrition for Athletes - A Handbook for Coaches, American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, N.W., Washington, D.C. 20036. 1971. 64 pp. \$2.50.

This handbook deals with basic nutritional needs of teen-age athletes, with accompanying dietary recommendations; general considerations of nutrition and diet during periods of athletic training; special problems relating to eating and drinking before, during, and after athletic events; examination and evaluation of nutritional claims made for dietary supplements which are promoted for the use of athletes. The American Dietetic Association and the Nutrition Foundation cooperated in the publication of this valuable reference.

28. Nutrition for the Growing Years, 2nd edition, Margaret McWilliams, John Riley & Sons, New York. 1975. 452 pp.

BOOKS/PAMPHLETS

Beginning with nutrition basics, this book goes on to describe the relationship of nutrition to the mental and physical growth of children before and after birth. Nutrition for the pregnant and lactating mother, milk for the infant, food for the first year of life and for the preschool years are included in the first chapters. Teachers will be especially interested in the chapters which deal with the growth, development, and nutritional needs of children from nursery school through adolescence. Included in these chapters are techniques of assessing nutritional status, case studies of adolescents, special needs of athletes. Weight control, special dietary needs, and questions and answers about nutrition make up the last three chapters. This would be a useful background and reference book for teachers seeking to understand the relationship of nutrition to child growth and development.

29. Nutrition Labeling - How It Can Work for You, National Nutrition Consortium, Inc., 9650 Rockville Pike, Bethesda, Maryland 20014. (301) 530-7050. 1975. 134 pp. \$2.00.

This booklet was written as a guide to help educators and others understand and present information about nutrition labeling regulations which reveal and identify the nutritional values of our food. A considerable amount of background information on basic nutrition is included to assist in understanding what the values really mean. A helpful and reliable booklet for updating information in this relatively new area.

30. Nutrition Labeling, Tools for Its Use, U.S. Department of Agriculture, Agriculture Information Bulletin No. 382, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. April, 1975. 57 pp. \$1.15.

This publication gives detailed information about what is on food labels and how to use the information provided. An exercise which can be used to practice use of label information is included, along with a sample worksheet. Tables of nutrition values of foods, and lists of foods that are important sources of nutrients are included. Other related government publications are listed, together with information about their availability. A useful reference book for teachers of home economics, health, or science, or for the school nutrition library.

31. Nutrition Reviews - July 1974 - A Special Supplement, D. M. Hegsted, Ph.D., Editor, The Nutrition Foundation, Office of Education and Public Affairs, 888 Seventeenth St., N.W., Washington, D.C. 20006. 1974. 73 pp. \$2.50.

This supplement, published as a pamphlet, is devoted to nutrition misinformation and faddism. Authoritative writers examine the claims made for various special diets, use of vitamins to cure illness, organic foods, and food cults. The articles are written in non-technical language and should be highly informative and interesting to teachers who will be dealing with some of the current issues in nutrition.

BOOKS/PAMPHLETS

32. Nutritional Disorders of Children - Prevention, Screening, and Followup, Samuel J. Fomon, M.D., U.S. Department of Health, Education and Welfare, Public Health Service, U.S. Government Printing Office, Washington, D.C. 20402. 1976. 123 pp. \$1.55 paperback.

This book will be of special interest and usefulness to health service people such as nurses, nutritionists, and dental hygienists. However, teachers will find certain portions of it valuable in understanding both points of view on such controversial issues as limiting dietary cholesterol in children and alternative methods of controlling or modifying obesity in children. For health service people the book can be used as a handbook, since it contains fairly detailed instructions for weighing, measuring height or length, measuring skin fold, interviewing for dietary patterns, and related procedures. This book would be a valuable and inexpensive addition to any nutrition library.

33. Organizing for Nutritious Vended Food, Center for Science in the Public Interest, 1757 S Street, N.W., Washington, D.C. 20009. 1977. 8 pp. No charge. Send self-addressed, stamped envelope when requesting.

This flyer explains why it is desirable to vend nutritious foods in schools in place of non-nutritious foods, and tells how to organize school and community to bring about a change in policy concerning vended foods. While some nutritional statements in the campaign literature tend to be a bit sweeping, the package is well thought out and would be a great convenience for PTA and other groups contemplating such a campaign.

34. Sources of Free and Inexpensive Instructional Materials, Compiled by Nutrition and Technical Service Staff, Food and Nutrition Service, U.S. Department of Agriculture. October 1976. No charge. Single copies available from Food and Nutrition Services, Department of Public Instruction, 126 Langdon St., Madison, Wisconsin 53702.

This pamphlet lists sources of free and inexpensive instructional materials from professional and other health associations, trade associations, and food industry and related firms. Names and addresses are given and a key which indicates special materials, such as posters, quantity recipes, weight control, special diets.

35. Teaching about Food and Hunger - 33 Activities, George G. Otero and Gary R. Smith, Graduate School of International Studies, University of Denver, Denver, Colorado 80208. No date. 128 pp. \$5.95.

This volume contains a wide variety of supplementary teaching activities designed to complement existing curricula related to food and food issues. It is not intended to be used as a text or self-contained unit. Some activities are discussion starters, some present factual data, some focus on critical thinking skills, and some are simulation games. There are activities to help teach food production and distribution, nutrition, food shortages, food habits, meal planning, and other food topics currently being dealt with in junior-senior high schools as well as in community groups.

BOOKS/PAMPHLETS

The activities are designed to be used with adult groups as well as junior-senior high school grades. In some cases they could be used in upper elementary grades as well. They are appropriate supplementary materials in just about any course of study related to food and food issues: home economics, social studies, population and environmental problems, contemporary problems, government and economics.

36. Teaching Nutrition, Second Edition, Ercel Eppright, Mattie Pattison and Helen Barbour. The Iowa State University Press, Ames, Iowa 50011. 1963.

The authors of this book present one whole chapter of generalizations and facts about nutrition which will be valuable to the non-nutrition person as a guide to determining basic content. In other chapters, the authors discuss the meaning and value of food to people, food supply and distribution, trends in health and nutrition, public health nutrition problems, signs of inadequate nutrition, trends in food consumption, differences among groups in food consumption, international nutrition, and a host of other topics. They also include chapters on teaching methods and evaluation in nutrition.

Despite the rather old publication date it provides a great deal of helpful and accurate information on nutrition and would be of assistance to any teacher.

37. That We May Eat, The 1975 Yearbook of Agriculture, United States Government Printing Office, Superintendent of Documents, Washington, D.C. 20402. \$7.30 (or write to your U.S. Congressperson for a complimentary copy).

The 1975 Yearbook reports on successes in food and agriculture experimentation carried out by State Agricultural Experiment Stations. The book describes past achievements, tells of ongoing research and looks into the future for problems and solutions. It is a record of 100 years of work done by the Experiment Stations. This book can serve as a general reference book for teachers, a library resource and a source of information for high school students.

38. What People Eat - An Introduction to Chemistry and Food Sciences, I. Raw, A. Bromley, E. Parisier, J. Vournakis, Wm. Kaufman, Inc., One First Street, Los Altos, California 94022. 1975. \$9.75 paperback.

Intended to be a student text, this book is included because it is unique in its intent to relate food to chemistry. Exact and detailed instructions are given on how to proceed to collect and record food intake for one day, how to keep records and how to carry out a chemical analysis of the food eaten. Materials and equipment needed are given, as are sample calculations and explanations for what is being done and why. Chemistry teachers considering use of the book should review it carefully to judge whether it can be used with general high school classes or only with advanced classes.

CATALOGUES

39. Cereal Institute, Inc., 135 South LaSalle Street, Chicago, Illinois 60603. (312) 782-7140.

Leaflets, posters, journal reprints, and consumer leaflets are among the materials produced by the Cereal Institute. Some materials are available in single copies for teachers and others in class size quantities. Write for listing of specific titles. Materials are useful in teaching about cereal products.

40. Florida Department of Citrus, 3150 Des Plaines Avenue, Suite #103, Des Plaines, Illinois 60018 (312) 827-8197.

Florida Department of Citrus produces booklets for use with children from kindergarten through senior high school, informational booklets for adults, colored posters, recipe cards, mobiles. Their materials are available without cost in quantities. Specific materials change from time to time. Write for a catalogue and order sheet. Materials available are particularly useful in teaching about citrus fruits and their use in meals and snacks.

41. National Dairy Council, Dairy Council of Wisconsin, 12345 Capitol Drive, Milwaukee, Wisconsin 53222. (414) 466-1340.

National Dairy Council produces a variety of educational materials in addition to the curriculum guide mentioned elsewhere in this publication. Information about their publications is available without charge from the Wisconsin address above. Publications are available without cost to residents of some areas of the state. Residents in any area of the state may purchase teaching materials at a nominal cost. Materials produced by the Dairy Council deal with all four food groups.

42. National Livestock and Meat Board, 444 North Michigan Avenue, Chicago, Illinois 60611.

The National Livestock and Meat Board will send a complimentary copy of their Educational Publications and Audio Visual Aids Catalogue on request. Their publications are available at a nominal cost and are designed to be of interest to teachers, homemakers, health professionals, food industry personnel, and others. They produce wall charts, recipes, consumer guides to buying meat, and other kinds of materials, as well as a bi-monthly newsletter, Food and Nutrition News. Subject of material published is limited to meat products.

CURRICULUM GUIDES

43. An Analysis of Selected Curriculum Guides Used for Nutrition Education in Grades K-12, Go, Christine, Society for Nutrition Education, 2140 Shattuck Avenue, Suite 1110, Berkeley, California 94704. May 1976. \$4.25.

This monograph was prepared under contract to the National Dairy Council, to provide independently researched information regarding the current status of nutrition education programs, grades K-12, in American schools. The curriculum guides included in the analysis are listed in the Appendix, although the evaluation of the guides is coded so it is not possible to relate the evaluation directly with a particular guide.

The monograph would be of special interest to curriculum planners and supervisors, who might wish background information in planning their own nutrition curriculum. The listing of guides in the Appendix is extensive and is categorized under the headings of consumer education, health education, home economics education, nutrition education, and school food service education.

44. Curriculum Guide for Health Education: Nutrition, The Curriculum Development Center of The Catholic University of America, undated (received March 1976). From National Catholic Educational Assn., One Dupont Circle, Suite 350, Washington, D.C. 20036, 112 pp., \$12.50.

This Guide contains four units, the first two of which, Nutrition and Consumer Education - Foods, deal directly with nutrition issues. These two units account for about two-thirds of the book. (The remaining two units on Community Resources and the Handicapped do not relate directly to nutrition). Each unit is developed on a modular approach which includes concepts, cognitive and affective objectives, learning activities and an extensive listing of appropriate resource materials. Current nutrition issues and social concerns receive considerable attention.

Designed for use at junior and senior high school level, it would be of interest to teachers of health, home economics, science, and social studies.

45. Food for You, Margaret McWilliams and Linda Davis, Ginn and Company, Lexington, Mass. 1977.

This book was written for use by students at the secondary level and could be used as a fairly complete curriculum on personal nutrition in science, health, physical education, or home economics classes. The book does not go into social or world issues related to food supply, processing, or distribution. A Teachers Guide and Tests accompanies the paperback student text. In this guide the authors explain that their purpose is to give the student every possible chance to be successful in his study of nutrition, because they believe success leads to increased confidence and better attitudes toward nutrition. The writing style and format of the book are consistent with this philosophy. Questions, pictures, charts, and graphs add to the readability.

46. Food-Your Choice - A Nutrition Learning System,* National Dairy Council, 6300 N. River Road, Rosemont, Illinois 60018. 1977.

The Nutrition Education System is a K-6 curriculum guide which is packaged in kits according to grade level: K-2, 3-4 and 5-6. Each kit, or box, contains an overview of the entire sequential system. Also included in the overview is a statement of rationale, key ideas which are used throughout all levels, and objectives for the one particular level contained in each box.

The second component of each kit is a series of several instructional units. The instructional units include background information for the teacher; objectives for the unit with activities indexed for each objective; a statement of purpose, list of materials and detailed description of procedure for each activity; student activity sheets; and unit evaluation sheets (teacher, student and parent).

The third component is resource materials. This section contains some actual reference materials for teacher and student use and a list of other references and resource materials.

*Among the many resources available, this curriculum guide may be of particular interest to K-6 teachers. The National Dairy Council curriculum, FOOD-Your Choice, is a total curriculum package which has been designed to teach key ideas through objectives and activities planned for each of three levels: K-2, 3-4 and 5-6. The key concepts identified by the Dairy Council relate very closely to the Conceptual Structure developed in Wisconsin for nutrition education. These key concepts remain constant throughout the K-6 portion of the NDC curriculum and are projected for use in the 7-12 segment, now being written.

The guide was developed by a group of experts from the fields of nutrition, health education, school food service, elementary and secondary education and the behavioral sciences. The intent of the guide is to sequentialize nutrition education within the existing school curriculum so that later learning will build on previous learnings. The goal of the guide is to equip young people with the knowledge and values needed for healthful food choices throughout life.

The National Dairy Council curriculum is cited here because it is very current, was done by a highly qualified group of experts and is readily available to every local school in Wisconsin.

Information about kits is available on request from the Dairy Council of Wisconsin, 12345 Capitol Drive, Milwaukee, Wisconsin 53222. (414) 466-1340.

47. Health Education - A Planning Resource for Wisconsin Schools, Wisconsin Department of Public Instruction, Dr. Barbara Thompson, State Superintendent, Chet Bradley, Coordinator and Editor. The Department, 126 Langdon Street, Madison, Wisconsin 53702. 1977.

A health education planning guideline, designed to assist a local school system health coordinator plan for health education. The book includes

CURRICULUM GUIDES

three parts: part one deals with the process of curriculum development, part two lists health competencies and possible topics for classroom activities and part three includes state laws and other pertinent references.

48. Occupational Food Service Education, A Competency Based Articulated Model for Secondary and Post-Secondary Schools in Wisconsin. Wisconsin Department of Public Instruction and Wisconsin Board of Vocational, Technical and Adult Education, 126 Langdon Street, Madison, Wisconsin 53702. 1975. \$3.50.

This curriculum guide identifies competencies for production, service and mid-management personnel in food service, gives objectives, content, learning experiences and resources and evaluation suggestions for each position. The objective of the guide is to offer a statewide model which can be used to plan educational programs which will be articulated from one level to another through the secondary and post-secondary vocational and technical institutions.

49. State Curriculum Guides for Nutrition Education and Health Education. Compiled by Nutrition Education and Training Group, Nutrition and Technical Service Staff, Food and Nutrition Service, U.S. Department of Agriculture. October, 1976. No charge.

An annotated list of state nutrition curriculum guides, listed alphabetically. Complete information about where the guides may be ordered and cost, if any, is included.

Single copies available on request from Food and Nutrition Services, Department of Public Instruction, 126 Langdon Street, Madison, Wisconsin 53702.

PERIODICALS

50. Contemporary Nutrition, published month^{ly}, no charge. Write A. Elizabeth Sloan, Editor, Nutrition Department, General Mills, Inc., Box 113, Minneapolis, Minnesota 55440.

A one-page publication, each issue deals with one topic related to nutrition. Content each month is written by a specialist in the subject matter field. A few related references are given. Subjects range from specific disease entities and the relationship of nutrition to their management, to nutrition education. Somewhat technical, the publication might be of greatest interest to health professionals, science teachers and others with a basic understanding of nutrition.

51. Food and Nutrition, Published bimonthly. Yearly subscription \$3.00. Food and Nutrition Service, U.S. Department of Agriculture, Washington, D.C. 20250. Note: May be available to schools without cost. Write on letterhead and indicate your involvement in nutrition education or school food service.

This magazine carries articles relating primarily to U.S. Department of Agriculture programs, such as nutrition education, child nutrition programs, school lunch and breakfast programs, food stamps, food for the elderly. Articles are written in popular, non-technical style and serve as an idea exchange for workers in school food service programs, school administrators and teachers.

52. Journal of Home Economics, published in September, November, January, March and May, \$13.00 a year to individuals not eligible for membership in American Home Economics Association. Published by the Association, 2010 Massachusetts Avenue, Washington, D.C. 20036.

Although this Journal does not deal exclusively with nutrition subject matter, it regularly carries articles about nutrition and is a good journal for the nutrition educator to review from time to time.

53. Journal of Nutrition Education,* quarterly, subscription \$10.00/year from Journal of Nutrition Education, 2140 Shattuck Avenue, Suite 1110, Berkeley, California 94704.

This Journal regularly includes articles on nutrition activities and ideas which have been tried in schools. Research is reported also and some articles deal with community education or education for special groups such as women and children. Reviews of books and other educational materials are included in every issue, making it a valuable source of information on new materials. This magazine would be a useful resource for a library or an individual teacher who does a significant amount of nutrition teaching (health, home economics).

*Special attention is called to the Journal of Nutrition Education since it deals entirely with nutrition education and serves as the best single source of information on other new materials through its extensive Review section.

PERIODICALS

54. Nutrition News, published four times annually, \$1.00 per year. National Dairy Council, 6300 N. River Road, Rosemont, Illinois 60018.

This is a four-page publication which includes a lead article on a current nutrition topic plus a column called Tools and Techniques, which serves as an idea exchange for methods of teaching nutrition. Brief articles on new developments are included, and new publications are reviewed. Any teacher of nutrition might find information of interest in this newsletter.

55. Nutrition Notes, published quarterly, no charge. Write United Fresh Fruit and Vegetable Association, 1019 19th Street, N.W., Washington, D.C. 20036.

The information in this publication is non-technical and is derived from standard medical and scientific publications. It ranges over many aspects of nutrition, including research findings, government actions, new publications, information about food production, distribution, supply, population, and so forth. The bulletin would be of interest to those teaching science, social studies, home economics, agriculture, vocational education, or health, as well as school food service personnel.

56. Quaker Quotes, quarterly flyer, no charge. Consumer Service Department, Quaker Oats Company, Merchandise Mart Plaza, Chicago, Illinois 60654.

This quarterly flyer presents nutrition information and recipes using Quaker products. It would be of interest to teachers of Home Economics and possibly elementary teachers.

57. School Foodservice Journal. Published ten times a year with combined July/August and November/December issues, subscription \$20.00 per year for non-members (of the American School Food Service Association), American School Food Service Association, 4101 East Iliff Avenue, Denver, Colorado 80222. (303) 757-8555.

This journal is devoted to articles of interest to school food service personnel in their task of preparing and serving nutritious and well-balanced meals to school children. In addition, almost every issue has at least one article relating to nutrition education. In addition to food service personnel, this journal would be of interest to home economics teachers, elementary teachers, and curriculum planners.

PEOPLE

STATE ORGANIZATIONS AND AGENCIES

Organization or Agency	Office
Dairy Council of Wisconsin	Carol Jean Erwin, Executive Director 12345 Capitol Drive Milwaukee, WI 53222 (414) 466-1340
Department of Public Instruction	Chet Bradley Supervisor, Health Education Virginia Cade, Supervisor, Nutrition Education Donald Chambers, Ph.D. Supervisor, Mathematics Kenneth W. Dowling, Ph.D. Supervisor, Science H. Michael Hartoonian, Ph.D. Supervisor, Social Studies Gordon O. Jensen, Ph.D. Supervisor, Physical Education Virgil Martinson, Ph.D. Supervisor, Agriculture Edward J. Post State Director Food and Nutrition Services Margaret Strauss Elaine Staaland Supervisors, Home Economics Leonard Sterry, Ph.D. Supervisor, Industrial Education 126 Langdon Street Madison, WI 53702 (608) 266-3390

PEOPLE

Organization or Agency	Office
Food and Nutrition Extension Service, State Specialist	235 Home Economics Building University of Wisconsin Madison, WI 53706 (608) 262-2611
Home Economics Extension State Leader	Dr. Marlys Richert Lowell Hall 610 Langdon Street Madison, WI 53706 (608) 262-1915
State Division of Health Nutrition Section Chief	Martha S. Kjenvet Division of Health P.O. Box 309 Madison, WI 53701 (608) 266-2661
Note: The Division of Health employs public health nutritionists in each of eight state District offices. These offices and the counties they serve are listed here.	<u>District #1</u> 5709 Odana Road Madison, WI 53719 (608) 266-2245 (Columbia, Dane, Dodge, Grant, Green, Jefferson, LaFayette, Iowa, Richland, Rock, Sauk)
	<u>District #2</u> 6815 Capitol Drive Milwaukee, WI 53216 (414) 466-9763 (Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, Waukesha)
	<u>District #3</u> 458 S. Military Road Box 269 (Mail Address) Fond du Lac, WI 54935 (414) 922-1290 (Calumet, Fond du Lac, Green Lake, Marquette, Outagamie, Waupaca, Waushara, Winnebago)

PEOPLE

Organization or Agency	Office
State Division of Health (Continued)	<u>District #4</u> 1181 Western Avenue P.O. Box 3860 (Mail Address) Green Bay, WI 54303 (414) 494-9571 (Brown, Door, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Shawano, Sheboygan)
	<u>District #5</u> 3550 Mormon Coulee Road LaCrosse, WI 54601 (608) 788-0700 (Buffalo, Crawford, Jackson, LaCrosse, Monroe, Trempealeau, Vernon)
	<u>Districts #6 and #8</u> 718 W. Clairemont Avenue Eau Claire, WI 54701 (715) 836-5362 (#6 - Barron, Clark, Chippewa, Dunn, Eau Claire, Pepin, Pierce, Polk, St. Croix. (#8 - Ashland, Bayfield, Burnett, Douglas, Iron, Price, Rusk, Sawyer, Taylor, Washburn)
	<u>District #7</u> Schick Plaza P.O. Box 697 (Mail Address) Rhinelander, WI 54501 (715) 369-2840
	1681 Second Avenue South P.O. Box 270 (Mail Address) Wisconsin Rapids, WI 54494 (715) 423-4730 (Adams, Florence, Forest, Juneau, Langlade, Lincoln, Marathon, Oneida, Portage, Vilas, Wood)

PEOPLE

Organization or Agency	Office
Wisconsin Board, Vocational, Technical and Adult Education	Hill Farms State Office Building 7th Floor Madison, WI 53702 (608) 266-1700 or (608) 266-0001
Wisconsin Heart Association	Margaret Baer Educational Materials Coordinator 795 N. VanBuren Milwaukee, WI 53202 (414) 271-9999 Ext. 231
Wisconsin Home Economics Association	Mary Beth Kuester Executive Secretary P.O. Box 507 Madison, WI 53701
Wisconsin Dietetic Association Wisconsin Nutrition Council Wisconsin School Food Service Association	These organizations do not have a fixed address. Information about current officers may be obtained from the following: Food and Nutrition Extension Services Jane Voichick, Ph.D. 235 Home Economics Building University of Wisconsin Madison, WI 53706 (608) 262-2611 Food and Nutrition Service Director Edward J. Post Department of Public Instruction 126 Langdon Street Madison, WI 53702 (608) 266-3509

PEOPLE

WISCONSIN COLLEGES TEACHING NUTRITION SUBJECTS

The following list suggests places where course work in nutrition is available in Wisconsin Colleges.

Organization or Agency	Office
<u>CARDINAL STRITCH COLLEGE</u> Food and Nutrition	Office of Admissions Cardinal Stritch College 6801 Yates Road Milwaukee, Wisconsin 53217
<u>MOUNT MARY COLLEGE</u> Clinical Dietetics	Office of Admissions Mount Mary College Menomonee River Parkway Milwaukee, Wisconsin 53222
<u>SILVER LAKE COLLEGE</u> General Home Economics	Office of Admissions Silver Lake College Manitowoc, Wisconsin 54220
<u>UNIVERSITY OF WISCONSIN - GREEN BAY</u> Nutritional Science Department	College of Human Biology University of Wisconsin - Green Bay Green Bay, Wisconsin 54302
<u>UNIVERSITY OF WISCONSIN - LA CROSSE</u> Nutrition Education	Health Education Department University of Wisconsin - La Crosse La Crosse, Wisconsin 54601
<u>UNIVERSITY OF WISCONSIN - MADISON</u> Dietetics, Nutritional Sciences, Food Administration, Food Science, College of Agriculture and Life Sciences	Health Education School of Education University of Wisconsin - Madison Madison, Wisconsin 53706
<u>UNIVERSITY OF WISCONSIN - MILWAUKEE</u> Dietetics Foods and Nutrition	Home Economics Office 997 Enderis Hall University of Wisconsin - Milwaukee Milwaukee, Wisconsin 53201

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Organization or Agency	Office
<u>UNIVERSITY OF WISCONSIN - STEVENS POINT</u> Dietetics Food and Nutrition with options in Food Service Management, General Food and Nutrition, or Experimental Food and Nutrition	School of Home Economics University of Wisconsin - Stevens Point Stevens Point, Wisconsin 54481
<u>UNIVERSITY OF WISCONSIN - STOUT</u> Dietetics Food Service Administration	School of Home Economics University of Wisconsin - Stout 215 Home Economics Building Menomonie, Wisconsin 54751
<u>VITERBO COLLEGE</u> Home Economics Related Majors Community-Medical Dietetics	Viterbo College 815 South Ninth Street La Crosse, Wisconsin 54601

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LOCAL ORGANIZATIONS AND AGENCIES

Organization or Agency	Office
County Extension Offices	Usually located in court house, county building, or agriculture center. Consult telephone directory.
Public Health Nursing Service, County	Usually located in court house or county building. Consult telephone directory.
Public Health Nursing Service, City	Offices of city nurses are usually located in city halls or municipal buildings.
School Nurses	Offices of school nurses can be located through the school administration office.

For exchange of information
on nutrition programs
and activities

NUTRITION

PROGRAM NEWS

U. S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

SEPTEMBER-DECEMBER 1976

Nutrition Education

Mary M. Hill¹

Dr. Mary M. Hill until her retirement in 1975 had as one of her responsibilities the development and publication of Nutrition Program News. We are indebted to her for this issue of Nutrition Program News.

Most American educators would agree that one aim of education is to prepare our people to live effectively in a free society. It is also generally agreed that health influences effectiveness; especially if health is defined as a state of complete physical, mental, and social well-being rather than mere freedom from disease. If this is so, then nutrition defined as "the control of health insofar as it is affected by the food we eat" becomes a concern of educators.

If the health of a nation is important to national survival, then health instruction should be provided for all people at a time of life when it will be most likely to effect behavioral changes in health functions. Most educators have found that children's habits are most easily influenced in the early years. Although one is never too old to learn, it sometimes takes much longer.

Personal observation in communities across the country reveals that many community programs are in operation but very few schools give systematic attention to the nutritional aspects of health. During the past 60 years, attempts have been made to include nutrition in elementary school programs. Throughout these years our knowledge of the science of nutrition has grown more rapidly than our ability

to persuade school administrators that the inclusion of suitable interpretations of nutrition and education toward the development and maintenance of desirable food habits in school programs is well worth the cost.

In this issue of Nutrition Program News we will recall some of the highlights in the development of sound programs, something about the situation today, and what seems to remain to be accomplished.

HIGHLIGHTS IN THE DEVELOPMENT OF NUTRITION EDUCATION

Establishments of the Relationship of Nutrition to Health

Man's interest in food and what happens to it in the human body dates back as far as we have records. This interest, however, remained in the realm of the philosophical until scientific facts were validated and principles formulated in several fields of science, such as physics and chemistry, which became the basis of the science of nutrition.

The contributions of scientists, such as Lavoisier, Lusk, Benedict, Atwater, Rose, Rubner, and countless others, provided our early understandings of combustion, metabolism, and food composition. The development of various types of respiration apparatus also contributed to our knowledge of the relationship of nutrition to the health of man.

As the body of knowledge grew, questions arose concerning the functions, utilization, human requirements, and sources of nutrients. Then evidence, which threw light on this area of inquiry, provoked more questions concerning interrelationships among the various nutrients. Research has

¹ Nutrition Consultant, Flemington, N.J. 08822.

continued in all these areas down to the present time, but unknowns and areas that are not clearly understood still exist.

Laboratories both in the United States and abroad have conducted and reported numerous carefully controlled studies which have helped to establish the basic principles of nutrition. Other carefully controlled studies have established their application to human health.

Aids in the Development of School and Community Programs

In the early 1900's investigators, using the knowledge available, attempted to put the facts into practice to improve the nutritional health of people. Three areas of information were needed before recommendations for improvement could be made. First, some knowledge of human requirements for the known nutrients was essential. Second, information about food composition was needed. The first tables of food composition had been compiled by Atwater with the help of Woods and were published in 1896, titled "The Chemical Composition of American Food Materials." Third, was information on food consumption—what foods in what quantities were being consumed. Many small studies of particular population groups were made and food guides were developed. Research in all these areas continues and the body of knowledge continues to grow.

These early investigators made recommendations and also made some evaluations to determine the effectiveness of their efforts. One of the earliest studies was conducted by the Society for Improvement of Conditions of the Poor. The study was initiated in 1914 in New York City and its purpose was to provide guidance to homemakers receiving welfare funds on how to obtain the most nutrition for the food dollar. Instruction was given in purchasing and preparing foods. After a 10-year period, a survey was made to evaluate the program. A study was made of the dietary practices of 100 families that had received instructions and compared them with those of a similar number of families who had not received instruction. The result of the study indicated that nutrition education programs are expensive, because they require a long period of time. However, when evaluated in terms of benefits accrued, they are well worth the cost.

Recommended Dietary Allowances (RDA's).—In the 1940's recommended dietary allowances were made for energy and those nutrients for which adequate data on human requirements and food sources were available. These recommendations were made in terms of calories and nutrients. It remained for the nutritionists to translate these values into kinds and amounts of food to have daily or weekly.

The RDA's are continuously under review and are updated periodically to take into account new knowledge

of nutrient requirements for human health. They provide a yardstick for evaluation of diets of population groups.

The great value to nutrition education is that investigators can now use the same yardstick for evaluation and a measure of consistency can exist in the recommendations made to people in all parts of the country.

Food guides.—Good diets can result from many different combinations of foods. The more one knows about food composition, the easier it is to make a great variety of food choices that will result in a good diet.

When dealing with people who have little knowledge of food composition, some rule of thumb is needed to help them make good choices. Reliable food guides have, over the years, provided this guidance. "Food for Fitness—A Daily Food Guide" is the most recent guide published by the U.S. Department of Agriculture. (See NPN March-April 1973).

This guide can also lend consistency to recommendations made throughout the country. It is based on our knowledge of human requirements, our knowledge of food sources of the nutrients the U.S. population is likely to choose, and our knowledge of the composition of foods. Furthermore, it is easy to use and does not require much time to roughly evaluate family diets.

It is, therefore, a guide that requires the fewest drastic changes in food habits. The fewer changes in food habits that are needed, the more likely the program will be effective.

Enrichment of bread, flour, and cereals.—In the 1940's it became apparent that although whole grain cereals and breads were recommended to achieve good food selections, the people continued to prefer and to buy the refined products. A recommendation was made to enrich these refined products with several nutrients that were lost in the refining process. This recommendation was made possible by the research that determined the chemical nature of these nutrients and the ability to synthesize them at a price that made the enrichment of cereals and flour reasonable.

Many States, although not all, passed enrichment laws. However, it is now possible to buy the enriched products virtually everywhere in the country.

School feeding.—As early as 1910, school officials were, in some places, supplementing skimpy or missing breakfasts by serving food to children in schools. Over the years various types of school feeding were initiated but not on a systematic basis that was possible after the enactment of the National School Lunch Act in 1946. This act enabled schools to receive help from the Federal government in providing children with a midday meal that met prescribed nutritional standards.

School feeding made it possible to extend the variety of foods that children would eat and made it possible for them

to have repeated experiences with desirable food practices—so important to the development of good eating habits. The school feeding program has an excellent potential for becoming an important educational tool if it is used for that purpose.

Basic concepts of nutrition for nutrition education.—In the 1950's and early 1960's many educational programs were initiated in schools and communities. Some were sound and, of course, some were not. People were getting their nutrition information from many sources including sources that were ready to bilk the public for cash.

Purveyors of sound nutrition principles became aware of a need for some guidelines for planning that could be used by all. A subcommittee of the Interagency Committee on Nutrition Education was charged to study the whole body of knowledge and sift out those ideas that were essential for *everyone* to know, comprehend, and use if high levels of nutritional health were to be achieved. Furthermore, these ideas were to be expressed in lay language.

After 2 years, in 1964, the Basic Concepts of Nutrition for Nutrition Education were published in Nutrition Program News. They read as follows:

1. Nutrition is the food you eat and how the body uses it.
 - ★ We eat food to live, to grow, to keep healthy and well, and to get energy for work and play.
2. Food is made up of different nutrients needed for growth and health.
 - ★ All nutrients needed by the body are available through food.
 - ★ Many kinds and combinations of food can lead to a well balanced diet.
 - ★ No food, by itself, has all the nutrients needed for full growth and health.
 - ★ Each nutrient has specific uses in the body.
 - ★ Most nutrients do their best work in the body with other nutrients.
3. All persons, throughout life, have need for the same nutrients but in varying amounts.
 - ★ The amounts of nutrients needed are influenced by age, sex, activity, and state of health.
 - ★ Suggestions for kinds and amounts of food needed are made by trained scientists.
4. The way food is handled influences the amount of nutrients in food, its safety, appearance, and taste.
 - ★ Handling means everything that happens to food while it is being grown, processed, stored, and prepared for eating.

Nutritionists all over the country used these concepts in planning and evaluating programs. They received publicity through Nutrition Program News and professional journals

and finally they were included in many textbooks that appeared in the late 1960's and early 1970's.

In the early 1970's a new subcommittee of the Interagency Committee on Nutrition Education was charged to review the concepts to be sure they were still consistent with the evergrowing body of nutrition knowledge and to revise if deemed necessary. The concepts were revised but only slightly.

1. Nutrition is the way the body uses food.
2. Food is made up of different nutrients needed for growth and health. Nutrients include proteins, carbohydrates, fats, minerals, and vitamins.
3. This concept was not changed but the second explanatory idea was deleted because it is not an essential concept.
4. The way food is handled influences the amount of nutrients in food, its safety, quality, appearance, taste, acceptability, and cost.

Nutrient labeling.—By the midsixties, demands were made for nutrition information about food composition to be made available to the public. The Food and Drug Administration set about to include this information on labeling of processed and packaged foods following recommendations of the 1969 White House Conference on Food, Nutrition and Health.

To simply list the known nutrient content of foods with the amounts available in each can or package would have been easy. However, this information would have been meaningless unless it was related to the needs of individuals. To simplify such complicated information to fit on a food label was a monumental task. The resulting plan was somewhat of an oversimplification but does give some idea of the nutrient value of specific foods for those who choose to use it. For the housewife to use it as a means of evaluating the diets of various members of her family requires further interpretation and is time-consuming.

Food assistance programs.—Nutrition education never can be fully effective if people do not have the money to buy a good diet. Over the years, there have been many family assistance programs at Federal, State, and local levels. The current Federal programs that provide food assistance include the Food Stamp Program, Special Supplemental Food Program (WIC Program), and National Nutrition Program for the Elderly. The Food Stamp Program provides the possibility for eligible families with little or no income to obtain free food stamps and other eligible families to purchase food stamps that gives the family more purchasing power than the stamps cost. The WIC Program provides supplemental food for infants, children up to 5 years, pregnant women, and nursing mothers. The National Nutrition Program for the Elderly makes meals available to many older Americans.

THE SITUATION IN THE MIDSEVENTIES

Scientifically there is no doubt that the food we eat is directly related to our state of health. Research in the mid-seventies continues to bear out the validity of the basic concepts of nutrition for nutrition education.

Food technology has increased the variety of food choices in the marketplace in terms of processed, prepared, and fabricated foods to the point where it would seem to be virtually impossible that a person could not select for himself a good diet from foods he will eat and enjoy.

Means of transportation have been improved to the point that the variety and abundance of food are available to people in every town and hamlet in the country.

Food assistance programs increase the purchasing power of those who do not have the money to purchase a good diet.

Educational techniques have been developed and demonstrated to be effective for passing on sound nutrition information and for motivating individuals to use it.

Communication is such that virtually everyone can be reached with nutrition education.

Good comprehensive nutrition education programs continue to be expensive because the development and maintenance of good eating habits take a long time.

A great many people in the United States have been influenced by sound nutrition education over the years. These people do choose and eat a good assortment of foods in amounts that are conducive to high levels of health and well-being. However, far too many do not.

One needs only to observe gatherings of people at schools, churches, offices, factories, ball games, vacation resorts, and the like to see that obesity exists at all age levels.

Studies reveal that far too many girls and women suffer from iron deficiency anemia and that other nutrition related malconditions exist among family members everywhere.

Schools continue to use the school feeding programs simply as a service instead of an educational tool. Nutritional goals of these programs are not consistent with current local eating patterns and so plate waste is extremely high and community members are aghast at the wastefulness of the program.

Observance in supermarkets and a few studies indicate that nutrient labeling is used to some extent by some people and not at all by many others.

The fact that food assistance programs are available to a great many people is no assurance that good diets will be purchased and eaten.

Why do such conditions exist? They exist in some part, at least, because to date the major emphasis in many nutrition programs is on making nutrition facts available. This has indeed been accomplished. There is a great wealth of nutrition information available in communities all over the country—some sound; some out of context. People, in trying to use these facts to their advantage, often distort their diets.

The emphasis needs to be on the development and maintenance of good food habits. Effecting changes in food habits where such changes are needed is difficult, very time consuming, and thus expensive. However, such changes are essential if nutrition education is to be successful in helping the majority of our people to achieve good nutritional health.

The goal can be stated in simple terms—to help all our people to learn to eat and enjoy a wide variety of foods and to eat all foods in moderation. To really achieve this goal, nutrition education must begin in the cradle and continue through the life cycle. Systematic, sequential programs in schools are essential.

We have made progress. We have a long way to go. Each new generation must be taught. The "going" may not be easy, but the advantages that have been demonstrated to be possible are so great that it is well worth the time, effort, and cost involved.

APPENDIX B

WISCONSIN STATUTES
with
IMPLICATIONS FOR NUTRITION EDUCATIONLaws of Wisconsin Relating to Public Schools

Chapter 115, Public Instruction

SUBCHAPTER II, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

115.28 General Duties

(1) General Supervision - Ascertain the condition of the public schools, stimulate interest in education and spread as widely as possible a knowledge of the means and methods which may be employed to improve the schools.

115.35 Health Problems Education Program

(1) A critical health problems education program is established in the department. The program shall be a systematic and integrated program designed to provide appropriate learning experiences based on scientific knowledge of the human organism as it functions within its environment and designed to favorably influence the health, understanding, attitudes and practices of the individual child which will enable him to adapt to changing health problems of our society. The program shall be designed to educate youth with regard to critical health problems and shall include, but not be limited to the following topics as the basis for comprehensive education curricula in all elementary and secondary schools: controlled substances, as defined in s. 161.01 (4); alcohol; tobacco; mental health; and related health and safety topics.

(2) In carrying out this section, the state superintendent may, without limitation because of enumeration:

(a) Establish guidelines to help school districts develop comprehensive health education programs.

(b) Establish special inservice programs to provide professional preparation in health education for teachers throughout the state.

(c) Provide leadership institutions of higher education to develop and extend curricula in health education for professional preparation in both inservice and preservice programs.

(d) Develop cooperative programs between school districts and institutions of higher education whereby the appropriate health personnel of such institutions would be available to guide the continuing professional preparation of teachers and the development of curricula for local programs.

(e) Assist in the development of plans and procedures for the evaluation of health education curricula.

115.34 School Lunch Program

(1) The department may contract for the operation and maintenance of school lunch programs and for the distribution, transportation, warehousing, processing and insuring of food products provided by the federal government. The form and specifications of such contracts shall be determined by the department. Amounts remaining unpaid for 60 days or more after they become payable under the terms of such contracts shall be deemed past due and shall be certified to the department of administration on October 1 of each year and included in the next apportionment of state special charges to local units of government as special charges against the school districts and municipalities charged therewith.

(2) The department shall make payments to school districts for school lunches served to children in the prior year as determined by the state superintendent. Payments to school districts shall equal the state's matching obligation under the national school lunch act, P.L. 79-396, as amended. Payments in the current year shall be determined by prorating the state's matching obligation based on the number of school lunches served to children in the prior year.

History: 1971 c. 125, 215; 1975 c. 39, 224.

115.345 Nutritional Improvement for Elderly

(1) Any school district approved by the superintendent may establish a system to provide the opportunity for authorized elderly persons to participate in its school lunch program. If a school board desires to establish such a service, it shall develop a plan for the provision of food services for elderly persons and submit the plan to the superintendent. Upon petition of 5% of the voters in the school district who voted in the last school board election, the school board shall formulate a food services plan, provided that hot food service facilities are available to school children in the district.

(2) Each plan shall provide at least one meal per day for each day that school is in regular session. The school board may provide additional service at other times in its discretion, if the number of eligible persons in the district or adjacent districts is of sufficient size, in the opinion of the superintendent, so that unwarranted production expense is not incurred.

(3) Any school board which operates a food service plan for elderly persons under this section shall make facilities available for service to elderly persons at every high school and junior high school in the district which provides hot food service to its students. Upon application, the superintendent may grant exceptions from compliance with this subsection for reasons of safety, convenience or insufficient interest in a given neighborhood. The school board may, in addition, provide service at elementary schools if desired.

(4) Meals may be served at schools where they are served to students or at any site more convenient to the majority of authorized elderly persons interested in the service. Food may be transported to authorized elderly persons who are unable to leave their homes or distributed to nonprofit organizations for such purposes. However, no state funds under this section may be used for food delivery to individual homes. The superintendent may require consolidation of programs between districts and between schools if such a procedure will be convenient and economical.

(5) Authorized elderly persons may be required to contribute toward the expense of food and production at a rate up to \$.65 per meal. The school board may file a claim with the department for reimbursement for reasonable expenses incurred in excess of this amount, excluding capital equipment costs, but not to exceed \$.20 per meal. Any cost in excess of \$.85 per meal may also be charged to participants. If the department approves the claim, it shall certify that payment is due and the state treasurer shall pay the claim.

(6) All meals served must meet the approval of the superintendent who shall establish minimum nutritional standards not inconsistent with federal standards and reasonable expenditure limits such that the average cost per meal is not excessive. The superintendent shall give special consideration to dietary problems of elderly persons in formulating a nutritional plan. However, no school board shall be required to provide special foods for individual persons with allergies or medical disorders.

(7) Participants in a program under this section may be required to document their Wisconsin residency in a manner approved by the department. The superintendent may issue identification cards to such persons if necessary.

(8) The superintendent shall adopt reasonable rules necessary to implement this section.

(9) In this section, "Authorized elderly person" means any resident of the state who is 60 years of age or more, or the spouse of any such person. A school board may admit nonresident persons who would otherwise qualify into its program except that no state funds under this section may be used to subsidize any portion of the meals served to such persons.

History: 1973 c. 190.

Chapter 118, General School Operations

118.01 Curriculum Requirements

(2) Physiology and Hygiene - Physiology and hygiene, sanitation, the effects of controlled substances under Ch. 161 and alcohol upon the human system, symptoms of disease and the proper care of the body shall be taught in either the 6th, 7th or 8th grade, but no pupil shall be required to take such instruction if his parents file with the teacher a written objection thereto. Instruction in physiology and hygiene shall be offered in every high school.

(5) Morals - Every public school shall provide instruction in morality and the individual's responsibility as a social being, including the value of frugality and other basic qualities and principles specified or referred to in section 22 of Article I of the constitution of this state insofar as such qualities and principles directly or indirectly affect family and consumer education.

(9) Dairy Products - Every public and private elementary and high school shall give instruction in the true and comparative vitamin content and food and health values of dairy products and their importance for human diet. The course of such instruction and the educational material therefor shall be prescribed by the department and shall be included in the instruction manuals for such schools. Such educational program shall be directed by the department through school district administrators and such other educational officials whose cooperation may be deemed necessary to insure its success. The department of agriculture, the department of health and social services and the college of agriculture and the extension division of the university of Wisconsin shall cooperate with and assist the department in the development and execution of such program.

(11) Family and Consumer Education - Every public high school shall provide instruction, as part of one or more existing courses developed by the school district in which the school is located and approved by the state superintendent, on the rights and responsibilities of the family and consumer, including, without limitation because of enumeration, the consumer and the economy; consumer behavior and decision-making; contracts; credit alternatives; budgeting and family finances, with emphasis on frugality and thrift; savings and investments; insurance; profit and loss; the responsibility and morality of family living; and other societal concerns for instilling qualities of integrity and fiscal competence in young persons during their formative family years in accord with sub. (5). At the option of the school district, such instruction may also be provided in a separate course.

118.235 Lunch Period for Teachers. Every school board shall grant daily a duty-free lunch period to each of its teachers, except that a school district may contract with any teacher employed by it for services during such period. Such period shall be not less than 30 minutes and shall be provided at or near the time of the regular lunch period.

Chapter 119, Milwaukee School System**119.22 Curriculum Requirements**

(1) Elementary Schools - Courses in reading, writing, spelling, English, grammar and composition, geography, arithmetic, elements of agriculture and conservation of natural resources, history and civil government of the United States and of Wisconsin, physical education, sanitation, physiology and hygiene, the effects of controlled substances under ch. 161 and alcohol upon the human system, symptoms of disease, proper care of the body and such other subjects as the board determines shall be included in the course of study in elementary schools in order to obtain the objectives identified by the board under s. 119.16 (1). If his parent files with the teacher written objection thereto, no pupil is required to take instruction in physiology and hygiene, in the effects of controlled substances and alcohol and in symptoms of disease.

Chapter 121.02, School District Standards

(1) (c) It shall provide a planned continuous inservice program for the professional staff.

Commentary

Why all the Fuss over Nutrition Education?

Philip L. White

The nutrition educator is often called on to justify nutrition education programs. This article gives some of the reasons why nutrition education is needed.

The U.S. has been called a nation of nutritional illiterates. If this is the case, it is not because of lack of information about food and nutrition; it must be lack of motivation to avail oneself of the information. The problem may be directly related to the lack of the necessary educational base to permit assimilation of the information. The state of knowledge of Americans is out of phase with the advanced state of knowledge in the science of nutrition. Obviously much more is known about nutrition and human needs than is manifest by the current practices of our population.

Nutrition and health educators must be concerned with human behavior and therefore must compete with all internal and external forces that define and control how an individual behaves. The fact that nutrition educators work with food—which brings to man not only sustenance for survival but one of his greatest pleasures—makes our task difficult.

Man is a creature of habit, and most of his habits are formed early in life. The nutrition educator enters the scene when many habits and attitudes are already formed. He seldom has the opportunity to write on a clean slate unless he is working with his own children. Even then, there is competition from the child's peer group. Also individuals—particularly adults—differ greatly in their readiness to learn. USDA, for example, recently reported that almost one-third of women surveyed did not want any more nutrition information (1)!

It is my feeling that adults are most likely to pay attention to nutrition information when they are frightened, threatened by hypertension, diabetes, or the need to undertake a diet to correct obesity that may underlie these diseases. Adults, then, must first be motivated to learn before they can be taught.

It might be well to consider certain aspects of lifestyle in the U.S. An appreciation of lifestyles is essential to anyone teaching about aspects of human behavior. Apart from the sanctions and rituals of religious doctrine, tradition now appears to have less influence on food patterns, according to market researcher Paul Fine (2). Certainly mothers teach daughters a little about food preparation and menu planning, but the fabric of their own dietary control over their families has worn thin. In general American families have only about four meals a week when all members are present. Tradition? Little chance for it.

Reasons Why

Failure of the consuming public to care enough about the benefits of abundant health results in an untenable incidence of malnutrition exemplified by obesity, poor performance in pregnancy and early infancy, nutritional anemias, and dental caries. The USDA and DHEW have published nutrition survey data illustrating the poor dietary practices of significant segments of our population.

One important concept in nutrition is that malnutrition is related to poverty, ignorance and indifference. Malnutrition of poverty is a national disgrace and unless corrected can lead to a cycle of poverty that can be self-perpetuating. Even without the learning disability associated with severe infant malnutrition, the poorly nourished child is a poor candidate for a good education.

THE AUTHOR is Director, Dept. of Foods and Nutrition, American Medical Assn., 535 N. Dearborn St., Chicago, IL 60610. He is President of the Society for Nutrition Education, 1975-76.

To the trilogy of poverty, ignorance and indifference, I would add permissiveness to cover the situation in which parents who know better and therefore are not ignorant permit their young children to indulge in excessive quantities of soft drinks and nonfood snacks. They literally teach their children poor food habits.

I am reminded of the Pillsbury Baseline Study (3), which found that while mothers accept the responsibility for their family's nutrition, and most thought they were doing a good job, less than 50% of the mothers could define a balanced diet. Major groups of foods were omitted from their definitions. How will the young mother learn? Nutrition education is needed to help consumers retain the best of tradition while improving food patterns for their better health.

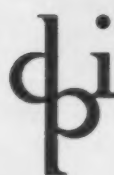
Nutrition education is involved with value setting, the procedure for evaluating goals for one's life, for establishing the risk-benefit relationships of life's challenges. If one has not developed a set of attitudes about lifestyle, he can hardly be expected to have good and useful attitudes about nutrition. For nutrition is part of the good things of life. Ultimately nutrition education is reaching people before they are required to make independent judgments, preparing for the time when children become parents.

I have tabulated below an additional series of reasons why nutrition education is important:

1. To equip one to make judicious food choices for health and well-being. Good nutrition is vital to the achievement of one's genetic potential.
2. A good knowledge of nutrition is essential for the maintenance of health, especially when food habits temporarily or permanently deteriorate—as in dieting, illness, old age and poverty and when an educational base might fail leading to "faddish" experimentation.
3. Food and nutrition education is necessary for saving money and avoiding waste. In essence nutrition education relates scientific knowledge to the total strategy for survival.
4. Nutrition education is a base for the evaluation of food and nutrition information, both good and bad.
5. Nutrition education can be of great benefit to those in the lowest economic stratum. While not as important as financial resources, nutrition education can equip the person who finds himself economically deprived to make the most expeditious use of financial resources.
6. Nutrition education is essential to reinforce or correct family teaching about food and nutrition. I hope for the time when nutrition education in the formal school system can be secondary to—and reinforcing of—education received in the family setting. That time is not yet with us; we have no choice but to undertake nutrition education programs in primary and secondary education.

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3. Bauman, H.E. and D. Ruch, "Problems of Researching and Marketing Fortified Foods and Their Implications for Consumption Trends," *Nutrients in Processed Foods, Vitamins and Minerals*, Publ. Sci. Group, Inc., Acton, Mass., 1974, pp. 145-149.



Memo to Administrators

from Barbara Thompson, Ph.D. / State Superintendent

August 29, 1973

Issue No. 73-2

Policy Statement
on
Food Served in Child Nutrition Programs

The U. S. Department of Agriculture regulation, Section 210.15b, Competitive Food Service, requires the State Agency and local school authorities to: "establish such regulations or instructions as are necessary to control the sale of food in competition with a school's nonprofit food service under the federal programs..."

Food services offered and/or sponsored by school or non-school groups which emphasize profit, minimize a foundation of nutritional quality, and permit proceeds to accrue for non-school food service purposes are excessively competitive with the School Food Service Program. Food service activities carried on within the school should be designed to meet the nutritional and educational needs of children.

Therefore, the following will be the policy of the Department of Public Instruction regarding the sale of competitive food items:

THE SALE OF EXTRA FOOD ITEMS DURING THE DESIGNATED MEAL PERIOD(S) IN SCHOOLS IN WHICH THE NONPROFIT NATIONAL SCHOOL LUNCH AND/OR SCHOOL BREAKFAST PROGRAM IS IN OPERATION SHALL BE RESTRICTED TO THOSE ITEMS RECOGNIZED AS MAKING A CONTRIBUTION TO THE CHILD'S DAILY NUTRITIONAL NEEDS, AND THE PROCEEDS THEREFROM SHALL INURE TO THE BENEFIT OF THE SCHOOL'S NONPROFIT FOOD SERVICE ACCOUNT.

The purpose of the school nutrition programs has been aptly stated by the Congress through the enactment of the National School Lunch Act and the Child Nutrition Act of 1966 and the U.S.D.A. regulations thereto: "It is hereby declared to be the policy of Congress...to safeguard the health and well-being of the Nation's children..." Participating schools "shall serve lunches that are nutritionally adequate...and shall also coordinate the school's health education activities with the formation of good eating habits in the lunchroom, to the end that participating children will gain a full understanding of the relationship between proper eating and good health."

Wisconsin Department of Public Instruction

126 Langdon Street • Madison, Wisconsin 53702

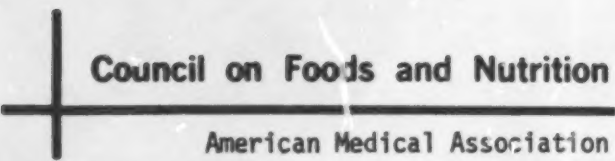
Accordingly, school food service programs should be committed to the concept that food served at school will contribute to the development of sound nutritional habits and to the daily food needs of children. The school food service program has a responsibility to fulfill its role as an educational laboratory where the child learns to make wise food choices. There is little evidence that man has an intrinsic ability to guide his food choices in order to meet his nutritional needs. School meals must be adequate in kind and quantity of food to provide a significant proportion of a child's recommended dietary allowance. A well-balanced dietary intake is essential for proper physical growth and development.

School food service programs should be operated in accordance with prescribed sanitation practices and procedures. Food available in the school should be under the management and control of the school food service department personnel who are trained in the proper handling of food and are knowledgeable about nutrition.

U. S. Department of Agriculture donated foods and cash reimbursements are made available to help schools provide nutritionally adequate meals at a reasonable charge to the students. Federal and State funds are provided to defray the entire cost of providing free lunches to eligible needy school children. The cash payments and donated foods thus provided must accrue to the benefit of the students through participation in a nonprofit food service program.

The policy as stated herein is consistent with the purpose and scope of the Federal Child Nutrition program which this Department has the contracted responsibility to administer. It further supports the philosophy of the Department as it relates to its concern for nutritionally adequate and educationally sound, nonprofit School Food Service Programs.

(NOTE: The above policy is applicable to school districts operating National School Lunch and School Breakfast Programs. It should serve as a guide to school districts operating independent food service programs.)



Council on Foods and Nutrition

American Medical Association

Confections and Soft Drinks in Schools

A Council Statement

ONE of the functions of a school lunch program is to provide training in sound food habits. The sale of foods, confections, and beverages in lunchrooms, recreation rooms, and other school facilities influences directly the food habits of the students. Every effort should be extended to encourage students to adopt and enjoy good food habits. The availability of confections and soft drinks on school premises may tempt children to spend lunch money for them and lead to poor food habits. Their high energy value and continual availability are likely to affect children's appetites for regular meals. Expenditures for soft drinks and most confections yields a nutritional return greatly inferior to that from milk, fruit, and other foods included in the basic food groups. When given a choice between soft drinks and milk or between candy and fruit, a child may choose the less nutritious. In view of these considerations, the Council on Foods and Nutrition is particularly opposed to the sale and distribution of confections and soft drinks in school lunchrooms.

The Council has authorized publication of the above statement.
PHILIP L. WHITE, SC.D., *Secretary*.

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APPENDIX F

Resolution

adopted by
Joint Committee on Health Problems in Education
of the
National Education Association and the American Medical Association
April 1974

Nutrition and Youth

- Whereas, Studies have shown that despite the attempts of parents and school personnel to teach children and youth the importance of healthy diets, young people often practice eating habits detrimental to their health, and
- Whereas, Publicity is extensive in areas of food faddism, crash-reducing diets and proprietary appetite suppressants, and
- Whereas, Inappropriate foods that encourage poor nutrition are being made available to youth, and
- Whereas, In many areas federal subsidization for type A lunches is being discontinued, and
- Whereas, Various patterns of providing nutritious food could be explored, such as going home for lunch, nutritionally-balanced lunches available to all students, low-cost breakfasts, nutritious lunches in vending machines, and nutritious sack lunches, therefore be it
- Resolved, That effective nutrition programs be developed to increase healthy eating practices among youth and that nutritionists, health educators, parents, directors of food service and health service personnel jointly explore current educational practices and financial support to expand and improve nutrition education and food service programs.

APPENDIX G

RESOLUTION ADOPTED BY THE WISCONSIN DENTAL ASSOCIATION
May 1976

Whereas, there persists to be found within the confines of private and public schools the presence of vending machines containing foods high in sugar content and low in healthful nutrition, and

Whereas, such foods add to dental disease and a breakdown of the general health of the consumer, and

Whereas, monies and appetite for such foods are in competition with monies and appetite for nutritious food also available through the various types of lunch programs, and

Whereas, junk foods readily available today in vending machines fosters and confirms poor eating habits directly in conflict with the health education being conducted in the school, and

Whereas, dental disease is a major preventable public health problem; therefore, be it

Resolved, That the Wisconsin Dental Association (WDA) takes a firm stand against the presence of non-nutritional, decay-causing foods in vending machines placed in schools; and be it further

Resolved, That the WDA aggressively endeavor to make private and public school boards, superintendents, principals and other appropriate agencies and/or groups aware of these problems through published articles, personal contact, letters, speeches, radio and TV, etc., on a continuing basis; and be it further

Resolved, That the WDA, through its appropriate committees expand this program when necessary to improve the dental health in particular and the overall health in general of children in the State of Wisconsin.

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